

SEVENTH YEAR ANNUAL REPORT

INTERSTATE POLLUTION CONTROL/ROTO-ROOTER SUPERFUND SITE
Winnebago County
Rockford, Illinois

Prepared for:

Interstate Pollution Control/Roto-Rooter Superfund Site Remedial Design/Remedial
Action Steering Committee

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1.0 INTRODUCTION

This Seventh Year Annual Report (“report”) was prepared by Environmental Information Logistics, LLC (EIL) on behalf of the Interstate Pollution Control/Roto-Rooter (“IPC”) Superfund Site Remedial Design/Remedial Action Steering Committee. This report discusses the results of long-term natural attenuation monitoring through the second quarter (June) 2014 sampling event, and satisfies the requirements of the IEPA-approved Groundwater Monitoring Work Plan (“GWMP”), dated March 1, 2006, the IEPA-approved First Year Annual Report/Technical Memorandum (“Tech Memo”), dated August 28, 2008, and the Consent Decree (with Appendix B – Statement of Work (SOW)) with the State of Illinois, dated March 1, 2006.

Section 6.0 of the IEPA-approved GWMP states the following:

“Annual reports will be prepared and submitted to the IEPA within 45 days of completing each second semi-annual groundwater sampling event (except in years 1, 5, 10, 15, etc., as discussed above and below). Each of the annual reports will include a summary of groundwater data collected during the past year and will include an evaluation, based on the IEPA-approved statistical methodology, of the source of any statistically significant changes to groundwater quality. Where appropriate, the annual report may also recommend changes to the statistical methodology for future monitoring events.”

Section 6.0 of the IEPA-approved GWMP also states the following:

“Five-year review reports will be submitted to the IEPA within 45 days of completing the second semi-annual sampling event at the end of each five-year cycle. Each five-year review report will include a cumulative summary of the results of statistical analysis of that data, and an evaluation of the source of any statistically significant changes to groundwater quality.”

This is the seventh annual report prepared since natural attenuation groundwater monitoring began at the site. This report includes an alternative source demonstration (ASD) to address the presence during this reporting period of 1,1-DCA and vinyl chloride in downgradient monitoring wells MW1 and MW4.

1.1 Site Description and Background

1.1.1 Site Description

The Interstate Pollution Control Inc. (IPC) site (“the site”) is located in an industrial area in the south central part of Rockford, Winnebago County, Illinois north west of Magnolia Peoples Avenue, as shown on the figure included in Attachment 1. The small (approximately 2.8 acre), irregularly-shaped site measures approximately 850 feet long along the north boundary line and 270 feet along the east boundary line.

During IPC's operation of the site it contained, at various times, at least six underground storage tanks, one large above-ground storage tank, an unlined surface impoundment, a gas fired incinerator, and several structures. IPC's operation at the site included transporting and bulking of waste oils, solvents and cyanide waste for incineration, resale and/or off-site disposal. Also during IPC's operation of the site, support service was provided to two sister companies; a portable toilet business and a Roto-Rooter franchise. Prior to IPC's operations, the site was extensively quarried and backfilled with various materials including a large quantity of foundry sand. Following filling of the quarry and immediately prior to IPC's operations, the site was the location of an auto salvage yard.

In 1991, private parties negotiated a Partial Consent Decree with the Illinois EPA and the Attorney General of the State of Illinois. The Partial Consent Decree required that the private parties ("Respondents") undertake a Remedial Investigation/Feasibility Study ("RI/FS") at the site. The RI Work Plan was completed in 1992, and the field investigations were conducted in 1993-1994. The final RI Report was submitted in 1997.

Significant removal actions have occurred at the IPC site on two different occasions. The incinerator was removed between 1976 and 1979. IPC conducted partial cleanup of the site in 1979 and 1980, in response to an Illinois Pollution Control Board Order. During this partial cleanup of the site, several bulk tankers containing wastes, approximately 180 yds³ of material from the surface impoundment, and approximately 120 yd³ of cyanide-contaminated soils were removed. Reportedly, 1,200 drums of contaminated materials were also removed from the site during this cleanup. The surface impoundment was backfilled and graded.

On August 6, 1991, the U.S. EPA issued a Unilateral Administrative Order ("UAO") to IPC and the Respondents to conduct additional removal activities at the site. Beginning in 1992, the Respondents to the UAO fenced the site, removed over 1,400 tons of solid and hazardous waste (including visibly stained soils), demolished and removed all above-ground and underground tanks and significant structures, installed a clay cover over the former impoundments, and substantially cleared the site.

These removal actions eliminated more than 2.9 million pounds of solid and hazardous waste. These materials constituted principal threats at the site and were removed, treated, destroyed or disposed of prior to the initiation of the RI/FS.

1.1.2 Constituents of Concern (COCs)

A total of 73 chemicals of potential concern ("COPCs") were identified originally in the RI based on previous detections in site soils and were selected for risk assessment. These included 11 volatile organic compounds ("VOCs"), 29 semi-volatile organic compounds ("SVOCs"), 14 pesticide/PCB compounds, 18 trace metals, and cyanide. In addition, a total of 33 chemicals previously detected in on-site groundwater were selected as COPCs. These included 11 VOCs, 10 SVOCs, one pesticide/PCB compound, 11 trace metals, and cyanide. A significantly reduced number of these COPCs were found to be risk drivers, as summarized in the "*Risk Driving Chemicals of Potential Concern*" table from Section V of the ROD.

Based on the previously discussed contaminant removal activities and the installation of the engineered barrier, and as stated in Section 2.4 of the SOW, “VOCs are the sole constituents of concern” with respect to long term natural attenuation groundwater monitoring at the site. Section 2.4 of the SOW specifies that “...groundwater will be sampled for TCL VOC’s only.” during long term natural attenuation monitoring. In addition, paragraph XII of the Record of Decision (ROD) states “If during each Five Year Review cycle spastically [sic] significant decreases in on-site and down gradient concentrations of trichloroethene and 1,1,1-trichloroethane in shallow groundwater are not verified (which cannot be attributed to upgradient sources), the SVE design pilot test will be implemented.”

Seven VOCs were detected in site monitoring wells during the background data collection period and as reported in the August 28, 2008 First Year Annual Report/Technical Memorandum. These are:

- 1,1,1-trichloroethane
- 1,1-dichloroethane
- 1,1-dichloroethene
- cis-1,2-dichloroethene
- tetrachloroethene
- trichloroethane
- vinyl chloride

However, only four VOCs were proposed originally as site-specific COCs for long-term groundwater quality evaluation. Three VOCs, 1,1-dichloroethane, vinyl chloride, and cis-1,2-dichloroethene, were specifically not proposed as COCs because they were generally detected at elevated concentrations in downgradient monitoring wells and because there was, and continues to be, strong evidence to suggest that the downgradient concentrations were, and continue to be, biased due to an off-site source (i.e., landfill gas from the adjacent Peoples Avenue Landfill). However, IEPA’s approval of the August 28, 2008 First Year Annual Report/Technical Memorandum was conditional based on the inclusion of all seven VOCs as COCs. Therefore, all seven of the VOCs detected during background data collection and as listed above are evaluated herein as COCs.

1.1.3 Extent of Groundwater Impacts

Remedial investigation activities were conducted at the site to evaluate the nature and extent of contamination, and to assess environmental impacts. Detailed results are provided in the *Final Remedial Investigation Report, Interstate Pollution Control Inc. Site, Rockford, Illinois* (Golder Associates Inc., December 1997). In general, site groundwater was found to be impacted with numerous organic and inorganic constituents from a combination of past site activities and from a number of upgradient sources. Some of the upgradient sources are being addressed under various regulatory actions and it appears that some are not. In addition, landfill gas from the adjacent Peoples Avenue Landfill was detected on-site and identified as another possible source of VOCs in groundwater.

The site is located adjacent to the much larger Southeast Rockford Groundwater Contamination (“SER”) site. The SER site began with the discovery of VOCs in groundwater within a

residential area of nearly two square miles. The discovery prompted the USEPA to ultimately extend water mains and connect 526 residences to City water at a cost of approximately \$4 million. The SER site was then added to the National Priorities List (“NPL”). After further IEPA study, the SER site was expanded to a ten square mile study area (“SER Study Area”) that incorporates almost 20 percent of the City and includes the IPC site. Studies have since indicated the widespread presence of chlorinated solvents in groundwater within this ten square mile area, in concentrations varying from less than 10 ppb to over 10,000 ppb.

The SER ROD defines the boundary of the SER Site by the 10 ppb chlorinated VOC plume that extended to approximately 1,200 feet southeast of the IPC site at its closest point (as of 1993). It is reasonable to expect that parts of this plume have expanded to the extent that it now affects groundwater beneath the IPC site.

As discussed in the 1999 site ROD, there are/were also a number of other known groundwater contaminant sources located near the IPC site. For example, the former Mattison Machine Works is located approximately 1,000 feet to the northeast (i.e., upgradient). Previous studies at Mattison Machine Works dating back to 1993 indicate that a plume containing PCE (up to 10,600 ug/L), TCE (up to 1,500 ug/L), and 1,1,1-TCA (up to 800 ug/L) is/was passing under that facility. These concentrations are much higher than are in groundwater at IPC. In addition, the Peoples Avenue Landfill, located immediately southeast of IPC, was previously identified as the likely source of groundwater contamination that contributed to the deterioration of groundwater quality in one of the City of Rockford’s public supply wells (Municipal Well No. 14), ultimately resulting in the abandonment of the supply well in 1971, prior to operations at IPC. The Peoples Avenue Landfill is also a known source of landfill gas (including methane) migration that previously entered the basement of the former Quaker Oats pet food manufacturing plant, located just southwest of the IPC site. And, as reported previously, there is evidence to suggest that landfill gas has impacted site monitoring well MW-4, which is located between the IPC site and the Peoples Avenue Landfill.

While remedial actions associated with some of the known sources within the SER Study Area are presently on-going, the IEPA and U.S. EPA have not specifically addressed some of the known groundwater contamination sources near to and upgradient of the IPC site. As indicated in the RI report and in the ROD, some of these sources contain elevated concentrations of VOCs, some of which are/were higher than those measured on-site.

As noted in the ROD,

“One of the most notable outcomes of the groundwater portion of the [RI] investigation was verification that a plume of chlorinated volatile organic compounds, at substantially higher concentrations than occur on site is approaching the site from the north east. The plume is expected to reach the IPC site in 15 to 45 years.”

This is significant because, given that the RI data collection activities were completed by 1994, the “plume” would have possibly reached the site as early as 2009, resulting in degradation of site groundwater quality that is completely unrelated to the performance of the selected remedy and which could be attributed mistakenly to the site. As such, the interpretation of the results of

long term natural attenuation monitoring must take into account the potential for groundwater quality degradation due to off-site sources. This approach reduces the possibility of incorrectly concluding that the selected remedy is insufficient and that the remedy must be supplemented with soil vapor extraction.

In fact, and as discussed in the First Year Annual Report/Technical Memorandum, subsequent annual reports, and the Five Year Review Report, an upgradient plume appears to have arrived at the site. This was acknowledged in an October 22, 2012 IEPA letter which stated:

“Based on the data in the report [Five Year Review Report], it appears that an upgradient plume may have arrived at the site and the down gradient concentrations of the contaminants mentioned above [trichloroethene and 1,1,1-trichloroethane] are decreasing.”

While the source of the plume is unknown, it is likely that it is the same one previously reported under the Mattison Machine Works property, and it is possible that the SER Site plume has also expanded to the extent that it now affects groundwater quality at the IPC site. Regardless of the source, it is reasonable to expect that the plume will continue to migrate through the site until such time that the upgradient sources are either removed or isolated, eventually affecting the three downgradient site monitoring wells, and ultimately the two river wells. As such, there will likely be further groundwater quality degradation in the site monitoring wells and possible new groundwater quality degradation in the river wells that is completely unrelated to the site and to the performance of the selected remedy.

Therefore, the statistical analysis plan was developed such that it allowed for recalculation of background standards (as appropriate) and/or adjustment of the evaluation protocol in order to reduce the likelihood of false positive statistical failure related to the off-site sources. Since it appears that the upgradient plume has arrived, and in accordance with the IEPA-approved GWMP and the IEPA-approved First Year Annual Report/Technical Memorandum, revised calculated background standards and statistical evaluation criteria were included in the Second Year Annual Report for selected COCs. This report, therefore, includes statistical evaluations that are consistent with those originally provided in the IEPA-approved GWMP and First Year Annual Report/Technical Memorandum and as modified by the Second Year Annual Report.

1.1.4 Remediation

The IEPA selected the remedial alternative with the concurrence of the U.S. EPA and after a detailed analysis of the alternatives included in the approved Feasibility Study (FS). The selected remedial alternative addresses the principal threats by installation of an impermeable barrier over the site, placing institutional controls on future site uses, reinforcing existing city and state groundwater use restrictions, and addressing groundwater contamination resulting from the site by implementing a monitored natural attenuation program. The selected remedy also includes a soil vapor extraction component as a contingency should the IEPA conclude during the five-year review periods that site and downgradient groundwater quality has not improved due to continued site releases which cannot be attributed to upgradient sources. However, the selected remedy does not take into consideration the potential affect of the numerous, known off-site impacts which now appear to be impacting site groundwater quality.

An SVE system was not included as an active part of the current remedy for a number of reasons, as discussed in the FS. First, the incremental improvement in reducing VOC migration to groundwater, and therefore in reducing risk to health and the environment, was deemed minimal following the construction of the surface barrier. Second, the treatment efficiency for an SVE system was not quantifiable given the relatively high VOC load currently on site and the on-going impacts from off-site sources. Finally, there were concerns that an SVE system would induce landfill gas migration from the Peoples Avenue Landfill that would adversely impact the operation of such a system. There were also concerns, discussed with the IEPA during the FS evaluation process, that such landfill gas migration would create a site health and safety issue related to possible explosive hazards.

Nothing has changed at the site that would alter the first criterion, above. The engineered barrier was installed and is being maintained, effectively eliminating both surface water infiltration and potential exposure to any remaining site contaminants. However, with the predicted arrival of the uncontrolled upgradient plume(s), groundwater quality beneath the engineered barrier is likely to degrade for an unknown period of time. Groundwater quality degradation from the upgradient plume(s) can be expected to continue until the upgradient source(s) are either removed or are isolated, and there is presently no indication that there are either ongoing or planned efforts to address the uncontrolled sources. This has resulted in a situation in which the IPC Steering Committee's ability to incrementally evaluate IPC's contribution to groundwater degradation is now extremely difficult, if not impossible.

Regarding the second criterion, if there was formerly an inability to quantify the efficacy of an SVE system given the then-current contaminant loads, then the arrival of the off-site plume(s), which could effectively increase on-site contaminant load, would further reduce the ability to quantify the efficacy of an SVE system. For example, if an SVE system were installed and operated concurrent with the arrival of the upgradient plume, then it would be likely that the degrading effect of the plume would far outweigh the remedial effect of the SVE system.

Regarding the third criterion, the potential for an SVE system to induce off-site landfill gas migration appears to be quite real given the documentation showing that groundwater in MW4, located adjacent to the People's Avenue Landfill, already contains dissolved methane which is likely the result of landfill gas migration on to the site. It is reasonable to expect that if landfill gas can migrate to the site under current, passive conditions (i.e., with no SVE system), then there is a greatly increased likelihood of additional landfill gas migration under active conditions (i.e., with an active SVE system) with a corresponding potential increase in groundwater quality degradation and health and safety related issues associated with landfill gas explosive hazards.

Finally, it must be emphasized that the SVE system would be designed to reduce contaminant load in site soils and thus reduce the potential for contaminant migration from site soil to site groundwater, premised on the assumption that current groundwater impacts are generally a function of the current soil contaminant load. Given that the upgradient groundwater plume(s), which appears to have already reached the site, contain higher concentrations of some COCs than are currently in site groundwater, it is fair to expect that the upgradient source will be significantly larger and/or more heavily contaminated than what presently remains in site soil.

Under these conditions the incremental improvement to site groundwater quality via the implementation of an SVE system will be immeasurable or nonexistent.

On the basis of these arguments, the IPC Steering Committee recommended previously (*River Well Statistics Technical Memorandum, June 1, 2010*), and continues to recommend, that the SVE system be excluded from further consideration as a contingent remedy.

The engineered barrier was completed in 2006. The groundwater monitoring natural attenuation program began in September 2007 and background data collection at the six site monitoring wells was completed in June 2008. The slight delay between the completion of the engineered barrier and the initiation of natural attenuation monitoring was based on the desire to complete the installation of the two river wells and to collect background data from them simultaneously with the six site monitoring wells. Unfortunately, the installation of the two river wells was delayed more than expected due to access issues beyond the control of the steering committee. Therefore, after a period of time the IEPA requested that background data collection begin at the six site wells even though the two river wells had not been installed.

The two river wells were installed in March 2009 and background data collection was completed following the fourth quarter 2009 sampling event. The results of the river well background data collection and the calculated COC standards were provided to the IEPA on June 1, 2010. This report includes data collected through June 2014 (i.e., the twelfth semiannual event at the site wells and the ninth semiannual event at the river wells).

1.2 Statistical Analysis Plan

The statistical evaluation plan (STEP) was included in the IEPA-approved First Year Annual Report/Technical Memorandum and was specifically designed to allow for subsequent modification to account for the anticipated influences from off-site contaminant sources and to reduce the possibility that those influences could result in statistical failures. Due the apparent arrival of the off-site plume and the continued landfill-gas influences in MW4, the STEP was modified in the Second Year Annual Report as follows:

- Intrawell background standards were recalculated for 1,1-DCA in MW3 and for PCE and TCE in MW6 to account for the arrival of the off-site (upgradient) contaminant plume.
- Interwell background standards were recalculated for 1,1-DCA, PCE, and TCE in the three upgradient wells to account for the arrival of the off-site (upgradient) contaminant plume.
- A statistical failure at MW4 would hereafter be based on a combined failure of an interwell *and* an intrawell background standard to reduce the possibility of a statistical failure due to landfill gas influences from the Peoples Avenue Landfill.

The evaluations included in this Seventh Year Annual Report are based on the modified STEP.

1.3 Seventh Year Annual Report Overview

The purpose of this report is to provide the results of long-term natural attenuation monitoring to date at the site, a comparison of the data to previously calculated background groundwater quality standards, and an evaluation of whether the site is currently impacting groundwater. This report is organized as follows:

- Section 2.0 provides an evaluation of groundwater quality based on a comparison of COC detections with calculated COC background standards.
- Section 3.0 includes an alternative source demonstration (ASD) for various COCs detected currently or previously in monitoring wells MW1 and MW4 and, in general, any other statistically significant changes to groundwater quality, if any.
- Section 4.0 includes a summary and conclusions.

2.0 EVALUATION OF SITE GROUNDWATER QUALITY

Background groundwater quality data collection was performed at the six site monitoring wells in accordance with the ROD, SOW, and IEPA-approved GWMP. A site-specific list of seven COCs was selected and background standards were calculated based on the first four quarters of background data collection. The COC list and calculated background standards were approved by IEPA. As discussed in detail in the Second Year Annual Report and summarized herein, selected background standards were recalculated in the upgradient wells to incorporate upgradient plume-affected data, and minor modifications were made to the statistical evaluation protocol, to reduce the possibility of future statistical failures based on influences from the upgradient plume.

Background data collection was completed in the two river wells following the fourth quarter 2009 sampling event. Specific COC background standards were calculated for both river wells and were submitted to IEPA on June 1, 2010 (*River Well Statistics Technical Memorandum*) and are the basis for the statistical comparisons included herein.

2.1 Site Groundwater Monitoring Network

The site groundwater monitoring network consists of six monitoring wells, designated MW1, MW2, MW3, MW4, MW5, and MW6. The locations of these wells are shown on the figure included in Attachment 2. Each well is screened at a depth of approximately 60 feet within the shallow sand and gravel aquifer. Both regional and local groundwater flow in this aquifer is generally from northeast to southwest, towards the Rock River. Based on this groundwater flow direction, monitoring wells MW3, MW5, and MW6 are hydraulically upgradient of the site. The remaining three monitoring wells, MW1, MW2, and MW4 are hydraulically downgradient of the site.

2.2 River Wells

Two river wells were installed in March 2009, as required, at the locations shown on the figure included in Attachment 2. The river wells are designated MW8 and MW9, and both were installed to a depth of approximately 19 feet. (Note: The designation MW7 is reserved for the “blind” duplicate sample submitted to the laboratory during each monitoring event). Based on current groundwater flow conditions, both river wells are hydraulically downgradient of the site.

2.3 Results of Ongoing Natural Attenuation Groundwater Monitoring

Semiannual groundwater sampling for each of the seven COCs was performed in each of the site monitoring wells during this reporting period. Quarterly monitoring was performed at the two river wells through the background data collection period (ending in the fourth quarter 2009) and then continued on a semiannual basis. The laboratory data reports are included as Attachment 3. A summary of the analytical results for each COC in each monitoring well during this monitoring period is included in the table in Attachment 4. The table in Attachment 4 also includes the calculated background standards and the results of confirmation resampling

conducted in January 2014. Concentration time trends for each COC in each well are included as Attachment 5.

Each laboratory data report was reviewed for completeness and accuracy, in accordance with the IEPA-approved quality assurance project plan (QAPP). The reviews included laboratory QA/QC documentation and the results of field and quality control blanks. Data validation summaries for each laboratory sampling report are included in Attachment 6.

A discussion of site groundwater quality is included below.

2.3.1 Upgradient Site Groundwater Quality

Overall upgradient groundwater quality has improved with respect to total VOC load since natural attenuation monitoring began in 2007. However, total VOC load during the last two years has remained virtually unchanged. The concentrations of tetrachloroethene (PCE) and trichloroethene have generally increased in upgradient well MW6 since 2007. And during the most recent monitoring event, the concentration of PCE in MW6 exceeded both its interwell and intrawell background standard. This is consistent with the apparent arrival of the off-site, upgradient VOC plume, as reported previously. As stated in the ROD,

“One of the most notable outcomes of the groundwater portion of the [RI] investigation was verification that a plume of chlorinated volatile organic compounds, at substantially higher concentrations than occur on site is approaching the site from the north east. The plume is expected to reach the IPC site in 15 to 45 years.”

Given that the RI data collection activities were completed by 1994, arrival of the plume by 2009 is entirely consistent with the predictions included in the RI Report. This appears to be further supported by the total (i.e., cumulative) VOC load trends included as Attachment 7. As shown in the total VOC load time trends, the total (i.e., cumulative) VOC load has always been higher in the three upgradient wells compared to the three downgradient wells since natural attenuation monitoring began in 2007. Clearly, therefore, upgradient groundwater quality is worse than is downgradient groundwater quality based on total VOC load.

The IEPA requested in their August 26, 2009 Second Year Annual Report comment letter that a graph showing the sum of trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA) in the upgradient site wells compared with the sum in the downgradient site wells be included in the annual reports. Such a time trend is included in Attachment 8. As shown on the graph, the total concentrations of these two compounds have been consistently higher in the upgradient wells. The sum of TCE and 1,1,1-TCA in the upgradient wells peaked in December 2009. Since that time, the concentrations of both compounds decreased fairly steadily for several years, and then increased modestly during the past two years. The most recent concentrations in the upgradient wells are nearly identical to when natural attenuation monitoring began in 2007, further suggesting that the upgradient plume persists.

During the same time period the sum of TCE and 1,1,1-TCA in the downgradient wells have generally mirrored the pattern observed in the upgradient wells. However, it is relevant to note that the sum of TCE and 1,1,1-TCA in the downgradient wells is now presently about 30% less

than it was at the start of natural attenuation monitoring, and this in spite of the arrival of the upgradient plume. And finally, the difference between the cumulative upgradient sums and the cumulative downgradient sums has increased from approximately 206 ug/L when natural attenuation monitoring began to 294 ug/L. Based on this comparison alone, there is evidence that groundwater quality has improved downgradient of the site compared to upgradient of the site.

Strictly speaking and consistent with the IEPA-approved statistical analysis plan, an intrawell exceedance in an upgradient well (e.g., the most recent PCE exceedance in MW6) is evidence of groundwater degradation due to an off-site source and is, therefore, grounds for recalculating the intrawell background standard. However, given that there was only one such exceedance during this monitoring period and the relatively stable total VOC load, we do not think that any further upgradient intrawell background standard revisions are appropriate at this time.

Also, the previously reported interwell exceedance of PCE in MW3 during the December 2011 monitoring event provides statistical evidence that the original background data set used to calculate the interwell standards may no longer be representative due to the arrival of the off-site plume. In other words, the current background data set, at least for PCE, may not properly account for temporal variability (i.e., as it is specifically affected by the arrival of the off-site plume). However, given that there was only a single interwell exceedance, and that exceedance has not been persistent, we do not currently propose the recalculation of any of the upgradient interwell background standards. This could change if there are additional interwell exceedances in any of the upgradient monitoring wells during future monitoring events.

2.3.2 Downgradient Site Groundwater Quality

Downgradient groundwater quality in the three site wells continues to improve. Total VOC load in the downgradient wells, depicted in the time trends included as Attachment 7, has decreased fairly steadily and is presently about 587 ug/L compared to 990 ug/L when natural attenuation monitoring began, a decrease of about 41 percent.

During this reporting period (and similar to the last reporting period) there was only one interwell exceedance, and that was for 1,1-DCA in well MW4. This compound has exceeded the interwell standard for several years. However, the concentration was below its intrawell background standard and, therefore, it does not represent a statistical failure. The presence of 1,1-DCA, along with vinyl chloride - both at relatively high concentrations compared to the other site monitoring wells - was reported previously in the First Year Annual Report/Technical Memorandum and was attributed to landfill gas from a known off-site/side gradient and uncontained source, the Peoples Avenue Landfill. This was the primary motivation behind our initial request to exclude these two compounds from long-term natural attenuation monitoring, which was denied by IEPA.

This report includes an alternative source demonstration (ASD) in Section 3.0 for 1,1-DCA in well MW4.

2.3.3 Downgradient River Well Groundwater Quality

Only one VOC, cis-1,2-DCE, was detected in river well MW9 during the December 2012 sampling event. However, neither compound was detected at a concentration exceeding its interwell background standard. No VOCs were detected in MW9 during the December 2013 sampling event. However, it was not confirmed by resampling.

Similar to last year, six VOCs, 1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, PCE, and TCE were detected in MW8 during the December 2013 sampling event. Of these, the concentration of 1,1-DCA slightly exceeded its interwell background standard. However, the exceedance was not confirmed by the subsequent resample collected in January 2014. Four VOCs, 1,1-DCA, cis-1,2-DCE, PCE, and TCE, were detected in MW8 during the June 2014 sampling event, but all at concentrations that were below their respective interwell background standards.

Based on the above results, there is no indication of site-related groundwater impacts in the river wells.

2.3.4 Quality Assurance/Quality Control Issues

There were no quality assurance/quality control issues identified during this reporting period.

3.0 ALTERNATIVE SOURCE DEMONSTRATION FOR COCS DETECTED IN SITE MONITORING WELLS MW1 AND MW4

Groundwater samples collected during the quarterly background monitoring were also analyzed for dissolved methane, specifically during the third quarter 2008 monitoring event, as reported previously in the First Year Annual Report/Technical Memorandum. Dissolved methane, a major component of landfill gas, was detected in five of the six site monitoring wells as summarized in the table below.

Results of Dissolved Methane Analyses

Sample Location	Concentration of Dissolved Methane (ug/L)	Reporting Limit (ug/L)
MW1	2.1	0.19
MW2	2.1	0.19
MW3	4.1	0.19
MW4	42	0.19
MW5	ND	0.19
MW6	1.2	0.19
MW7*	1.3	0.19
Field blank	ND	0.19
Trip blank	ND	0.19

ND = not detected at the reporting limit

* "blind" duplicate sample collected from MW6

3.1 Sources of Naturally Occurring Dissolved Methane

The relatively low dissolved methane concentrations in four of the wells may be indicative of methanogenesis, a naturally occurring form of anaerobic respiration associated with certain common microbes in the presence of organic material. Subsurface soil at the site was reported in the RI report to have contained relatively high concentrations of total organic carbon (TOC). Given that the recently constructed site cap has likely created subsurface anaerobic conditions, the presence of an abundant "food" source (i.e., the high TOC), it is not unreasonable to assume that methanogenesis is occurring. Therefore, the site-wide presence of relatively low concentrations of dissolved methane could indicate that natural attenuation is active.

3.2 Off-Site Sources of Dissolved Methane

The Peoples Avenue Landfill is located adjacent to and south/southeast of the site, and reportedly received a combination of residential, commercial, and industrial wastes. The combustible gas methane was previously detected in the basement of the adjacent pet food plant, and it was attributed to the Peoples Avenue Landfill (USEPA, 1976; RI Report, 1994). Two isolated areas with elevated combustible gas readings (i.e., methane) were also identified between the site and the Peoples Avenue Landfill during RI activities conducted in the early

1990's. Soil gas collected from these areas also contained slightly elevated concentrations of VOCs. The conclusion contained in the RI was:

"The USEPA and RI soil gas results indicate, therefore, that the Peoples Avenue Landfill may be an active source of combustible gases and, possibly, organic vapors in the Site area."

Landfill gas migration is a commonly known transport mechanism for numerous VOCs including tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, vinyl chloride, and others (Vogel et al., 1987). As such, landfill gas migration has been implicated to be a principal source of many VOCs, including those currently detected in site groundwater, in groundwater near landfills.

While dissolved methane was discovered in most of the site monitoring wells, the concentrations were relatively low and, therefore, are likely at least partially the result of on-site methanogenesis.

MW4

The concentration of 1,1-DCA continued to exceed its interwell background standard in MW4 during this reporting period, consistent with most of the historical sampling events. However, the concentration did not exceed its intrawell background standard. As such, the concentration does not constitute a statistical failure and, strictly speaking, is not subject to an Alternative Source Demonstration. However, the following information is provided for informational purposes.

Given that MW4 is located adjacent to the Peoples Avenue Landfill and it contains, by far, the highest concentration of dissolved methane compared to the other wells, it is highly likely that landfill gas from the Peoples Avenue Landfill is the source for much or all of the dissolved methane in MW4. This is consistent with the previous reports documented herein. And given that landfill gas is a common carrier of numerous VOCs, including 1,1-DCA and vinyl chloride, it is fair to conclude that elevated concentrations of compounds such as 1,1-DCA and vinyl chloride in MW4 are also the result of the presence of landfill gas.

It is important to note that neither 1,1-DCA nor vinyl chloride are exhibiting increasing trends in MW4, and concentrations are well within the range of those detected since the beginning of natural attenuation monitoring. In fact, the concentration of vinyl chloride has been decreasing steadily. More importantly, the total VOC load in MW4 has continued to decrease from a high of 389 ug/L in December 2007 to its lowest point of approximately 90 ug/L during the most recent sampling event, a drop of approximately 77 percent. In summary, therefore, there is no indication that groundwater conditions on MW4 are deteriorating due to the site and, in fact, it appears that overall groundwater conditions in this well have improved based on total VOC load.

MW1

There were no statistical failures at MW-1 during this reporting period. While there have been some historical interwell background standard exceedances for 1,1-DCA and vinyl chloride since natural attenuation monitoring began in December 2007, there have been no exceedances of the

corresponding intrawell background standards. Total VOC load in MW1 has decreased from a high of approximately 336 ug/L in June 2008 to approximately 226 ug/L during the most recent sampling event, a decrease of approximately 33 percent.

It is possible that landfill gas has also affected groundwater conditions in this well and have thus biased the concentration of 1,1-DCA and vinyl chloride, as indicated by the presence of dissolved methane in groundwater at this well. Other known (or unknown) upgradient sources may also be contributing sources. While MW1 is technically a downgradient well, it is located such that it could easily be considered sidegradient. Based on the location of MW1, it is easy to see that a plume migrating from the northeast or from the adjacent quarry could, potentially, impact MW1 while not affecting the upgradient wells.

In any case, overall groundwater conditions have clearly improved in MW1 with respect to total VOC load and there is no indication of site-related degradation in groundwater quality at this well.

4.0 SUMMARY AND CONCLUSIONS

The results of long-term natural attenuation monitoring to date indicate that total (i.e., cumulative) VOC load in the downgradient wells has decreased during this reporting period to near historic lows since natural attenuation monitoring began in 2007. Similarly, the cumulative concentrations of TCE and 1,1,1-TCA have also decreased considerably from their highest concentration levels. There does not appear to be any site-related groundwater degradation in either the site monitoring wells or in the river wells. The affects from the arrival of the upgradient plume appear to have generally stabilized for the moment, and the revised statistical standards and evaluation protocol appear to have satisfactorily addressed the impacts associated with the off-site plume and no further statistical evaluation revisions are currently recommended. However, it is reasonable to assume that the off-site plume will eventually migrate through the site and impact the downgradient monitoring wells, possibly resulting in new “false-positive” statistical failures that will need to be addressed either by revising calculated background standards or by changing the statistical evaluation protocol (or both).

While on-site methanogenesis is likely occurring, indicating that natural attenuation is active, the relatively high (i.e., anomalous) concentrations of dissolved methane in downgradient well MW4 appear to be the result of landfill gas migration from the Peoples Avenue Landfill. It is likely that the associated relatively high concentrations of 1,1-DCA and vinyl chloride in MW4 are the result of the presence of landfill gas and are not site-related. It is also likely that the presence of these compounds in other site wells are biased high due to the presence of landfill gas.

We look forward to the IEPA’s approval of this report. If you have any questions, please do not hesitate to call me at 630 834-8847.

Sincerely,
ENVIRONMENTAL INFORMATION LOGISTICS, LLC

A handwritten signature in black ink, reading "A. Michael Hirt". The signature is fluid and cursive, with the first name "A." and last name "Hirt" clearly legible.

A. Michael Hirt, P.G.
Senior Geologist

References

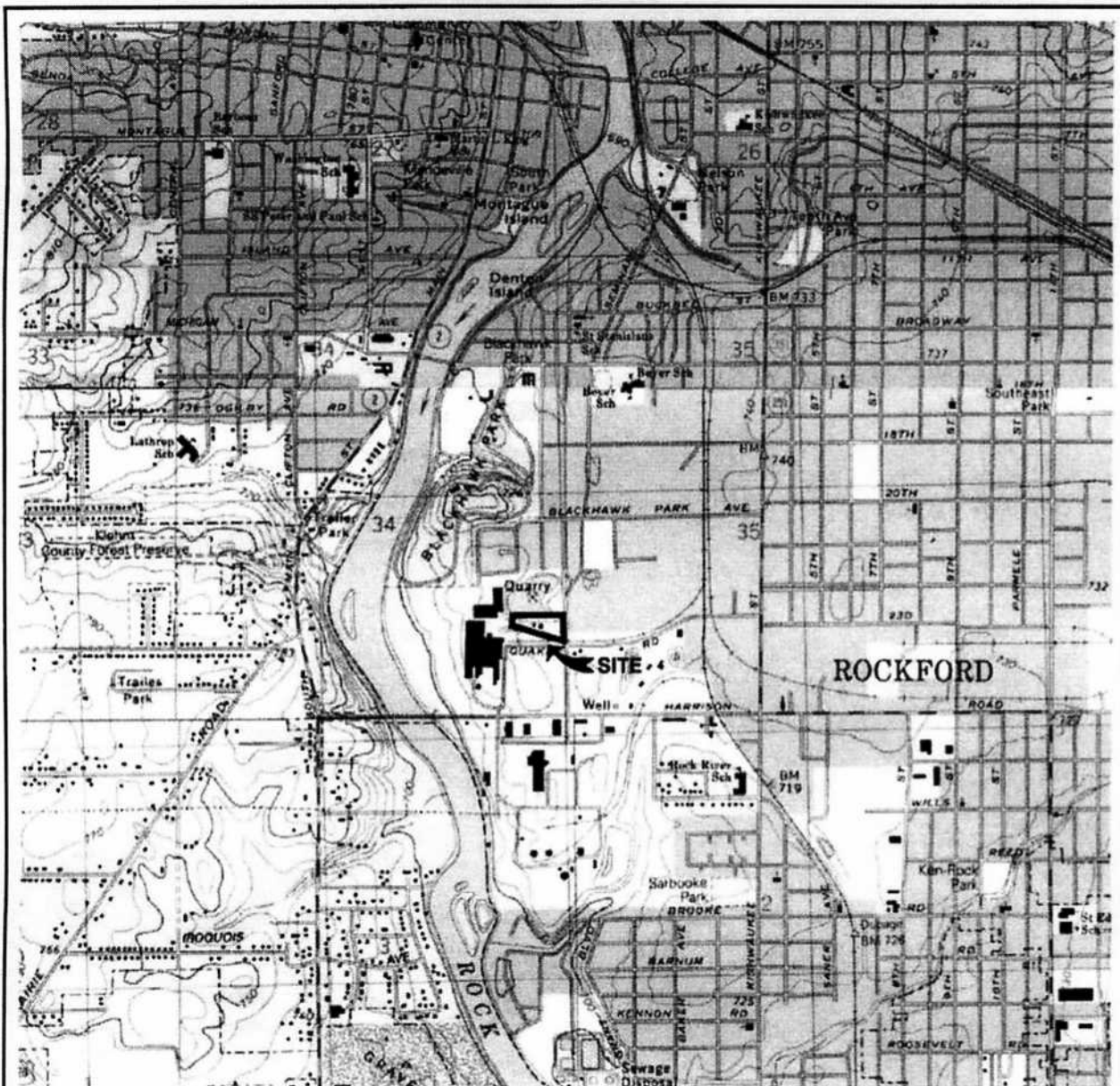
Golder Associates, Inc., 1994, Final Remedial Investigation Report, Interstate Pollution Control Inc. Site, Rockford, Illinois.

USEPA, 1976, *Leachate Damage Assessment: Case Study of the Peoples Avenue Landfill Solid Waste Disposal Site in Rockford, Illinois*, EPA/530/SW-517.

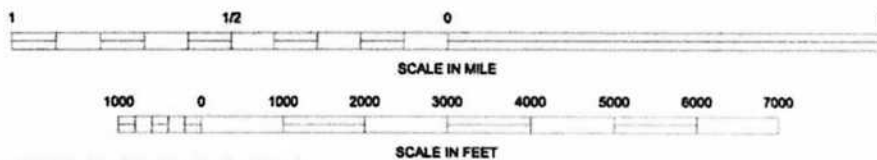
Vogel et al., 1987, *Transformation of Halogenated Aliphatic Compounds*, Environmental Science Technology, vol. 21, pp. 722-736.

Attachment 1


Site Location and Detail Maps



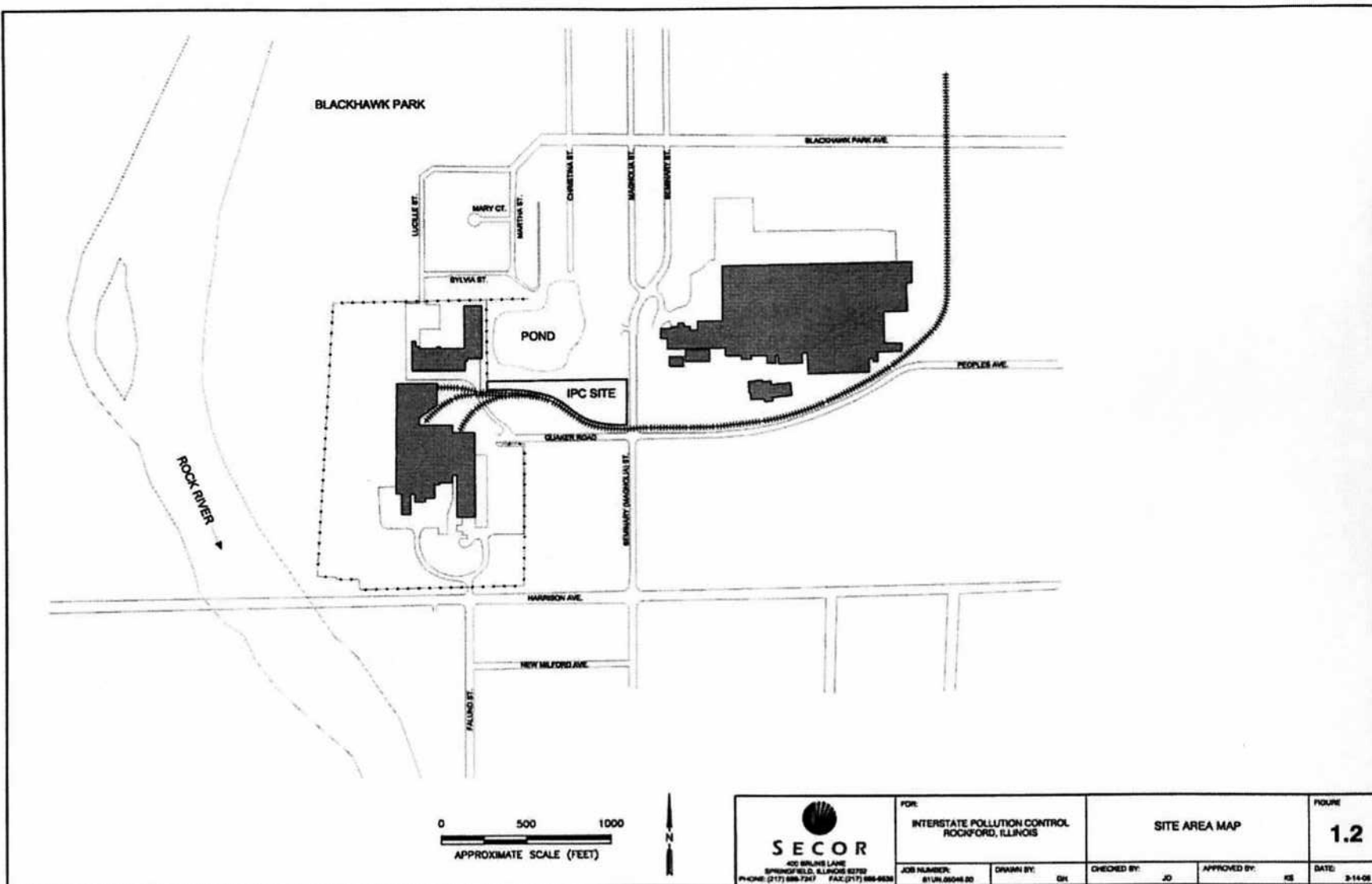
ILLINOIS



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; Rockford, IL North & South
Photorevised 1993

 SECOR 400 BRUNS LANE SPRINGFIELD, ILLINOIS 62702 PHONE: (217) 898-7247 FAX: (217) 898-8538	FOR: INTERSTATE POLLUTION CONTROL ROCKFORD, ILLINOIS		SITE LOCATION MAP		FIGURE 1.1
	JOB NUMBER: 61UN.05046.00	DRAWN BY: GH	CHECKED BY: JO	APPROVED BY: KS	DATE: 2-14-08

FILEPATH:Q:\CADD-61UPC\61UN.05046.00\proposals\061 figure 1.1 site location map.dwg\ghinkle\Feb 21, 2008 at 15:26\Layout site local



FILEPATH: G:\CADD\81\PC\81 UN 00046 B0\proposals\081 Figure 1.2 site area map.dwg; printed on 3/1/2008 at 10:23:55 a.m.; site area map

Attachment 2

**Figure Showing the Locations of the Long-Term Natural Attenuation
Monitoring Wells**

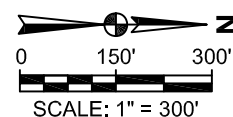


LEGEND

- IPC APPROXIMATE SITE BOUNDARY
- ⊕ LONG-TERM NATURAL ATTENUATION MONITORING WELL LOCATIONS

NOTES

1. AERIAL PHOTO PROVIDED BY WINNEBAGO COUNTY GEOGRAPHIC INFORMATION SYSTEM (WINGIS).



Attachment 3

Laboratory Data Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-68720-1

Client Project/Site: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)

405 Ritsher Street

Beloit, Wisconsin 53511

Attn: Ms. Mary Pearson



Authorized for release by:

12/20/2013 12:44:40 PM

Richard Wright, Senior Project Manager

(708)534-5200

richard.wright@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Job ID: 500-68720-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-68720-1

Comments

No additional comments.

Receipt

The samples were received on 12/17/2013 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C. Received 1 vial broken for sample 5. Received Trip Blank not on COC, added to COC and logged in.

GC/MS VOA

No analytical or quality issues were noted.

Detection Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW8

Lab Sample ID: 500-68720-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	7.2		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	18		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	36		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	8.4		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	77		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	11		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW MW9

Lab Sample ID: 500-68720-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.3		5.0	0.12	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW MW7

Lab Sample ID: 500-68720-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	13		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	13		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	13		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	170		5.0	0.12	ug/L	1		8260B	Total/NA
Trichloroethene	11		5.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW MW6

Lab Sample ID: 500-68720-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	11		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	10		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	7.2		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	64		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	12		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	81		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	28		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW MW5

Lab Sample ID: 500-68720-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	10		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	5.9		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	32		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	11		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	130		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	35		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW MW4

Lab Sample ID: 500-68720-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	31		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	6.9		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	58		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	8.2		5.0	0.20	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW3

Lab Sample ID: 500-68720-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	11		5.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	27		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	11		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	180		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	35		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW MW2

Lab Sample ID: 500-68720-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	4.2		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	12		5.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	50		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	11		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	170		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	31		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW MW1

Lab Sample ID: 500-68720-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	14		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	13		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	14		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	170		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	5.2		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	11		5.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: F.B.

Lab Sample ID: 500-68720-10

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 500-68720-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-68720-1	IPC GW MW8	Water	12/16/13 10:10	12/17/13 10:30
500-68720-2	IPC GW MW9	Water	12/16/13 10:28	12/17/13 10:30
500-68720-3	IPC GW MW7	Water	12/16/13 11:00	12/17/13 10:30
500-68720-4	IPC GW MW6	Water	12/16/13 12:37	12/17/13 10:30
500-68720-5	IPC GW MW5	Water	12/16/13 13:23	12/17/13 10:30
500-68720-6	IPC GW MW4	Water	12/16/13 13:57	12/17/13 10:30
500-68720-7	IPC GW MW3	Water	12/16/13 14:30	12/17/13 10:30
500-68720-8	IPC GW MW2	Water	12/16/13 15:00	12/17/13 10:30
500-68720-9	IPC GW MW1	Water	12/16/13 15:26	12/17/13 10:30
500-68720-10	F.B.	Water	12/16/13 15:45	12/17/13 10:30
500-68720-11	Trip Blank	Water	12/16/13 00:00	12/17/13 10:30

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW8

Lab Sample ID: 500-68720-1

Date Collected: 12/16/13 10:10

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 16:37	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 16:37	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/19/13 16:37	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 16:37	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 16:37	1
1,1-Dichloroethene	7.2		5.0	0.31	ug/L			12/19/13 16:37	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 16:37	1
Acetone	<20		20	1.3	ug/L			12/19/13 16:37	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 16:37	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 16:37	1
1,1-Dichloroethane	18		5.0	0.19	ug/L			12/19/13 16:37	1
cis-1,2-Dichloroethene	36		5.0	0.12	ug/L			12/19/13 16:37	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 16:37	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 16:37	1
1,1,1-Trichloroethane	8.4		5.0	0.20	ug/L			12/19/13 16:37	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 16:37	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 16:37	1
Trichloroethene	77		5.0	0.19	ug/L			12/19/13 16:37	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 16:37	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 16:37	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 16:37	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 16:37	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 16:37	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 16:37	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 16:37	1
Tetrachloroethene	11		5.0	0.17	ug/L			12/19/13 16:37	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 16:37	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 16:37	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 16:37	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 16:37	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 16:37	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 16:37	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 16:37	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 125		12/19/13 16:37	1
Toluene-d8 (Surr)	106		75 - 120		12/19/13 16:37	1
4-Bromofluorobenzene (Surr)	96		75 - 120		12/19/13 16:37	1
Dibromofluoromethane	101		75 - 120		12/19/13 16:37	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW9

Lab Sample ID: 500-68720-2

Date Collected: 12/16/13 10:28

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 17:01	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 17:01	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/19/13 17:01	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 17:01	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 17:01	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			12/19/13 17:01	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 17:01	1
Acetone	<20		20	1.3	ug/L			12/19/13 17:01	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 17:01	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 17:01	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			12/19/13 17:01	1
cis-1,2-Dichloroethene	7.3		5.0	0.12	ug/L			12/19/13 17:01	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 17:01	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 17:01	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			12/19/13 17:01	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 17:01	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 17:01	1
Trichloroethene	<5.0		5.0	0.19	ug/L			12/19/13 17:01	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 17:01	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 17:01	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 17:01	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 17:01	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 17:01	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 17:01	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 17:01	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/19/13 17:01	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 17:01	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 17:01	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 17:01	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 17:01	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 17:01	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 17:01	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 17:01	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 125		12/19/13 17:01	1
Toluene-d8 (Surr)	107		75 - 120		12/19/13 17:01	1
4-Bromofluorobenzene (Surr)	96		75 - 120		12/19/13 17:01	1
Dibromofluoromethane	106		75 - 120		12/19/13 17:01	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW7

Lab Sample ID: 500-68720-3

Date Collected: 12/16/13 11:00

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 17:26	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 17:26	1
Vinyl chloride	13		2.0	0.10	ug/L			12/19/13 17:26	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 17:26	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 17:26	1
1,1-Dichloroethene	13		5.0	0.31	ug/L			12/19/13 17:26	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 17:26	1
Acetone	<20		20	1.3	ug/L			12/19/13 17:26	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 17:26	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 17:26	1
1,1-Dichloroethane	13		5.0	0.19	ug/L			12/19/13 17:26	1
cis-1,2-Dichloroethene	170		5.0	0.12	ug/L			12/19/13 17:26	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 17:26	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 17:26	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			12/19/13 17:26	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 17:26	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 17:26	1
Trichloroethene	11		5.0	0.19	ug/L			12/19/13 17:26	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 17:26	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 17:26	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 17:26	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 17:26	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 17:26	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 17:26	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 17:26	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/19/13 17:26	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 17:26	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 17:26	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 17:26	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 17:26	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 17:26	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 17:26	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 17:26	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 125		12/19/13 17:26	1
Toluene-d8 (Surr)	105		75 - 120		12/19/13 17:26	1
4-Bromofluorobenzene (Surr)	99		75 - 120		12/19/13 17:26	1
Dibromofluoromethane	104		75 - 120		12/19/13 17:26	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW6

Lab Sample ID: 500-68720-4

Date Collected: 12/16/13 12:37

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 17:51	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 17:51	1
Vinyl chloride	11		2.0	0.10	ug/L			12/19/13 17:51	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 17:51	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 17:51	1
1,1-Dichloroethene	10		5.0	0.31	ug/L			12/19/13 17:51	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 17:51	1
Acetone	<20		20	1.3	ug/L			12/19/13 17:51	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 17:51	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 17:51	1
1,1-Dichloroethane	7.2		5.0	0.19	ug/L			12/19/13 17:51	1
cis-1,2-Dichloroethene	64		5.0	0.12	ug/L			12/19/13 17:51	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 17:51	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 17:51	1
1,1,1-Trichloroethane	12		5.0	0.20	ug/L			12/19/13 17:51	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 17:51	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 17:51	1
Trichloroethene	81		5.0	0.19	ug/L			12/19/13 17:51	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 17:51	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 17:51	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 17:51	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 17:51	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 17:51	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 17:51	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 17:51	1
Tetrachloroethene	28		5.0	0.17	ug/L			12/19/13 17:51	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 17:51	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 17:51	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 17:51	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 17:51	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 17:51	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 17:51	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 17:51	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125		12/19/13 17:51	1
Toluene-d8 (Surr)	106		75 - 120		12/19/13 17:51	1
4-Bromofluorobenzene (Surr)	96		75 - 120		12/19/13 17:51	1
Dibromofluoromethane	104		75 - 120		12/19/13 17:51	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW5

Lab Sample ID: 500-68720-5

Date Collected: 12/16/13 13:23

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 18:16	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 18:16	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/19/13 18:16	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 18:16	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 18:16	1
1,1-Dichloroethene	10		5.0	0.31	ug/L			12/19/13 18:16	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 18:16	1
Acetone	<20		20	1.3	ug/L			12/19/13 18:16	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 18:16	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 18:16	1
1,1-Dichloroethane	5.9		5.0	0.19	ug/L			12/19/13 18:16	1
cis-1,2-Dichloroethene	32		5.0	0.12	ug/L			12/19/13 18:16	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 18:16	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 18:16	1
1,1,1-Trichloroethane	11		5.0	0.20	ug/L			12/19/13 18:16	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 18:16	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 18:16	1
Trichloroethene	130		5.0	0.19	ug/L			12/19/13 18:16	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 18:16	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 18:16	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 18:16	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 18:16	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 18:16	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 18:16	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 18:16	1
Tetrachloroethene	35		5.0	0.17	ug/L			12/19/13 18:16	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 18:16	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 18:16	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 18:16	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 18:16	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 18:16	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 18:16	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 18:16	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 18:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125		12/19/13 18:16	1
Toluene-d8 (Surr)	107		75 - 120		12/19/13 18:16	1
4-Bromofluorobenzene (Surr)	97		75 - 120		12/19/13 18:16	1
Dibromofluoromethane	105		75 - 120		12/19/13 18:16	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW4

Lab Sample ID: 500-68720-6

Date Collected: 12/16/13 13:57

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 18:40	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 18:40	1
Vinyl chloride	31		2.0	0.10	ug/L			12/19/13 18:40	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 18:40	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 18:40	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			12/19/13 18:40	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 18:40	1
Acetone	<20		20	1.3	ug/L			12/19/13 18:40	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 18:40	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 18:40	1
1,1-Dichloroethane	6.9		5.0	0.19	ug/L			12/19/13 18:40	1
cis-1,2-Dichloroethene	58		5.0	0.12	ug/L			12/19/13 18:40	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 18:40	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 18:40	1
1,1,1-Trichloroethane	8.2		5.0	0.20	ug/L			12/19/13 18:40	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 18:40	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 18:40	1
Trichloroethene	<5.0		5.0	0.19	ug/L			12/19/13 18:40	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 18:40	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 18:40	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 18:40	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 18:40	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 18:40	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 18:40	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 18:40	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/19/13 18:40	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 18:40	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 18:40	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 18:40	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 18:40	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 18:40	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 18:40	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 18:40	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125		12/19/13 18:40	1
Toluene-d8 (Surr)	106		75 - 120		12/19/13 18:40	1
4-Bromofluorobenzene (Surr)	95		75 - 120		12/19/13 18:40	1
Dibromofluoromethane	103		75 - 120		12/19/13 18:40	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW3

Lab Sample ID: 500-68720-7

Date Collected: 12/16/13 14:30

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 22:57	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 22:57	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/19/13 22:57	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 22:57	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 22:57	1
1,1-Dichloroethene	11		5.0	0.31	ug/L			12/19/13 22:57	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 22:57	1
Acetone	<20		20	1.3	ug/L			12/19/13 22:57	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 22:57	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 22:57	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			12/19/13 22:57	1
cis-1,2-Dichloroethene	27		5.0	0.12	ug/L			12/19/13 22:57	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 22:57	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 22:57	1
1,1,1-Trichloroethane	11		5.0	0.20	ug/L			12/19/13 22:57	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 22:57	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 22:57	1
Trichloroethene	180		5.0	0.19	ug/L			12/19/13 22:57	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 22:57	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 22:57	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 22:57	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 22:57	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 22:57	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 22:57	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 22:57	1
Tetrachloroethene	35		5.0	0.17	ug/L			12/19/13 22:57	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 22:57	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 22:57	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 22:57	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 22:57	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 22:57	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 22:57	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 22:57	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 22:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 125		12/19/13 22:57	1
Toluene-d8 (Surr)	109		75 - 120		12/19/13 22:57	1
4-Bromofluorobenzene (Surr)	96		75 - 120		12/19/13 22:57	1
Dibromofluoromethane	104		75 - 120		12/19/13 22:57	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW2

Lab Sample ID: 500-68720-8

Date Collected: 12/16/13 15:00

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 23:46	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 23:46	1
Vinyl chloride	4.2		2.0	0.10	ug/L			12/19/13 23:46	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 23:46	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 23:46	1
1,1-Dichloroethene	12		5.0	0.31	ug/L			12/19/13 23:46	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 23:46	1
Acetone	<20		20	1.3	ug/L			12/19/13 23:46	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 23:46	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 23:46	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			12/19/13 23:46	1
cis-1,2-Dichloroethene	50		5.0	0.12	ug/L			12/19/13 23:46	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 23:46	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 23:46	1
1,1,1-Trichloroethane	11		5.0	0.20	ug/L			12/19/13 23:46	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 23:46	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 23:46	1
Trichloroethene	170		5.0	0.19	ug/L			12/19/13 23:46	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 23:46	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 23:46	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 23:46	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 23:46	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 23:46	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 23:46	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 23:46	1
Tetrachloroethene	31		5.0	0.17	ug/L			12/19/13 23:46	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 23:46	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 23:46	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 23:46	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 23:46	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 23:46	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 23:46	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 23:46	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 125		12/19/13 23:46	1
Toluene-d8 (Surr)	107		75 - 120		12/19/13 23:46	1
4-Bromofluorobenzene (Surr)	98		75 - 120		12/19/13 23:46	1
Dibromofluoromethane	104		75 - 120		12/19/13 23:46	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW1

Lab Sample ID: 500-68720-9

Date Collected: 12/16/13 15:26

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/20/13 00:36	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/20/13 00:36	1
Vinyl chloride	14		2.0	0.10	ug/L			12/20/13 00:36	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/20/13 00:36	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/20/13 00:36	1
1,1-Dichloroethene	13		5.0	0.31	ug/L			12/20/13 00:36	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/20/13 00:36	1
Acetone	<20		20	1.3	ug/L			12/20/13 00:36	1
Methylene Chloride	<10		10	0.68	ug/L			12/20/13 00:36	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/20/13 00:36	1
1,1-Dichloroethane	14		5.0	0.19	ug/L			12/20/13 00:36	1
cis-1,2-Dichloroethene	170		5.0	0.12	ug/L			12/20/13 00:36	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/20/13 00:36	1
Chloroform	<5.0		5.0	0.20	ug/L			12/20/13 00:36	1
1,1,1-Trichloroethane	5.2		5.0	0.20	ug/L			12/20/13 00:36	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/20/13 00:36	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/20/13 00:36	1
Trichloroethene	11		5.0	0.19	ug/L			12/20/13 00:36	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/20/13 00:36	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/20/13 00:36	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/20/13 00:36	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/20/13 00:36	1
Toluene	<5.0		5.0	0.11	ug/L			12/20/13 00:36	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/20/13 00:36	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/20/13 00:36	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/20/13 00:36	1
2-Hexanone	<20		20	0.56	ug/L			12/20/13 00:36	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/20/13 00:36	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/20/13 00:36	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/20/13 00:36	1
Styrene	<5.0		5.0	0.10	ug/L			12/20/13 00:36	1
Bromoform	<5.0		5.0	0.28	ug/L			12/20/13 00:36	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/20/13 00:36	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/20/13 00:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125		12/20/13 00:36	1
Toluene-d8 (Surr)	107		75 - 120		12/20/13 00:36	1
4-Bromofluorobenzene (Surr)	95		75 - 120		12/20/13 00:36	1
Dibromofluoromethane	104		75 - 120		12/20/13 00:36	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: F.B.

Lab Sample ID: 500-68720-10

Date Collected: 12/16/13 15:45

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/20/13 01:00	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/20/13 01:00	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/20/13 01:00	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/20/13 01:00	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/20/13 01:00	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			12/20/13 01:00	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/20/13 01:00	1
Acetone	<20		20	1.3	ug/L			12/20/13 01:00	1
Methylene Chloride	<10		10	0.68	ug/L			12/20/13 01:00	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/20/13 01:00	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			12/20/13 01:00	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			12/20/13 01:00	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/20/13 01:00	1
Chloroform	<5.0		5.0	0.20	ug/L			12/20/13 01:00	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			12/20/13 01:00	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/20/13 01:00	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/20/13 01:00	1
Trichloroethene	<5.0		5.0	0.19	ug/L			12/20/13 01:00	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/20/13 01:00	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/20/13 01:00	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/20/13 01:00	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/20/13 01:00	1
Toluene	<5.0		5.0	0.11	ug/L			12/20/13 01:00	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/20/13 01:00	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/20/13 01:00	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/20/13 01:00	1
2-Hexanone	<20		20	0.56	ug/L			12/20/13 01:00	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/20/13 01:00	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/20/13 01:00	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/20/13 01:00	1
Styrene	<5.0		5.0	0.10	ug/L			12/20/13 01:00	1
Bromoform	<5.0		5.0	0.28	ug/L			12/20/13 01:00	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/20/13 01:00	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/20/13 01:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 125		12/20/13 01:00	1
Toluene-d8 (Surr)	107		75 - 120		12/20/13 01:00	1
4-Bromofluorobenzene (Surr)	96		75 - 120		12/20/13 01:00	1
Dibromofluoromethane	103		75 - 120		12/20/13 01:00	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-68720-11

Date Collected: 12/16/13 00:00

Matrix: Water

Date Received: 12/17/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 19:05	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 19:05	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/19/13 19:05	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 19:05	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 19:05	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			12/19/13 19:05	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 19:05	1
Acetone	<20		20	1.3	ug/L			12/19/13 19:05	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 19:05	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 19:05	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			12/19/13 19:05	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			12/19/13 19:05	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 19:05	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 19:05	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			12/19/13 19:05	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 19:05	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 19:05	1
Trichloroethene	<5.0		5.0	0.19	ug/L			12/19/13 19:05	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 19:05	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 19:05	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 19:05	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 19:05	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 19:05	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 19:05	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 19:05	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/19/13 19:05	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 19:05	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 19:05	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 19:05	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 19:05	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 19:05	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 19:05	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 19:05	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 125		12/19/13 19:05	1
Toluene-d8 (Surr)	105		75 - 120		12/19/13 19:05	1
4-Bromofluorobenzene (Surr)	93		75 - 120		12/19/13 19:05	1
Dibromofluoromethane	102		75 - 120		12/19/13 19:05	1

TestAmerica Chicago

Definitions/Glossary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

GC/MS VOA

Analysis Batch: 216908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-68720-1	IPC GW MW8	Total/NA	Water	8260B	
500-68720-2	IPC GW MW9	Total/NA	Water	8260B	
500-68720-3	IPC GW MW7	Total/NA	Water	8260B	
500-68720-4	IPC GW MW6	Total/NA	Water	8260B	
500-68720-4 MS	IPC GW MW6	Total/NA	Water	8260B	
500-68720-4 MSD	IPC GW MW6	Total/NA	Water	8260B	
500-68720-5	IPC GW MW5	Total/NA	Water	8260B	
500-68720-6	IPC GW MW4	Total/NA	Water	8260B	
500-68720-11	Trip Blank	Total/NA	Water	8260B	
LCS 500-216908/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-216908/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 216976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-68720-7	IPC GW MW3	Total/NA	Water	8260B	
500-68720-8	IPC GW MW2	Total/NA	Water	8260B	
500-68720-9	IPC GW MW1	Total/NA	Water	8260B	
500-68720-10	F.B.	Total/NA	Water	8260B	
LCS 500-216976/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-216976/6	Method Blank	Total/NA	Water	8260B	

Surrogate Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-125)	TOL (75-120)	BFB (75-120)	DBFM (75-120)
500-68720-1	IPC GW MW8	105	106	96	101
500-68720-2	IPC GW MW9	106	107	96	106
500-68720-3	IPC GW MW7	104	105	99	104
500-68720-4	IPC GW MW6	103	106	96	104
500-68720-4 MS	IPC GW MW6	99	106	105	100
500-68720-4 MSD	IPC GW MW6	98	106	106	100
500-68720-5	IPC GW MW5	103	107	97	105
500-68720-6	IPC GW MW4	103	106	95	103
500-68720-7	IPC GW MW3	102	109	96	104
500-68720-8	IPC GW MW2	104	107	98	104
500-68720-9	IPC GW MW1	103	107	95	104
500-68720-10	F.B.	102	107	96	103
500-68720-11	Trip Blank	102	105	93	102
LCS 500-216908/4	Lab Control Sample	100	106	105	100
LCS 500-216976/4	Lab Control Sample	98	107	102	99
MB 500-216908/6	Method Blank	101	108	99	103
MB 500-216976/6	Method Blank	103	108	98	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-216908/6

Matrix: Water

Analysis Batch: 216908

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 10:02	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 10:02	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/19/13 10:02	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 10:02	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 10:02	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			12/19/13 10:02	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 10:02	1
Acetone	<20		20	1.3	ug/L			12/19/13 10:02	1
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 10:02	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 10:02	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			12/19/13 10:02	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			12/19/13 10:02	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 10:02	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 10:02	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			12/19/13 10:02	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 10:02	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 10:02	1
Trichloroethene	<5.0		5.0	0.19	ug/L			12/19/13 10:02	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 10:02	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 10:02	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 10:02	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 10:02	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 10:02	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 10:02	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 10:02	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/19/13 10:02	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 10:02	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 10:02	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 10:02	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 10:02	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 10:02	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 10:02	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 10:02	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 10:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 125		12/19/13 10:02	1
Toluene-d8 (Surr)	108		75 - 120		12/19/13 10:02	1
4-Bromofluorobenzene (Surr)	99		75 - 120		12/19/13 10:02	1
Dibromofluoromethane	103		75 - 120		12/19/13 10:02	1

Lab Sample ID: LCS 500-216908/4

Matrix: Water

Analysis Batch: 216908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	49.3		ug/L		99	70 - 120
Chloromethane	50.0	44.5		ug/L		89	50 - 134

TestAmerica Chicago

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-216908/4

Matrix: Water

Analysis Batch: 216908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	50.0	47.7		ug/L		95	62 - 138
Bromomethane	50.0	37.5		ug/L		75	50 - 150
Chloroethane	50.0	48.7		ug/L		97	50 - 150
1,1-Dichloroethene	50.0	48.4		ug/L		97	58 - 122
Carbon disulfide	50.0	48.2		ug/L		96	50 - 120
Acetone	50.0	46.2		ug/L		92	46 - 153
Methylene Chloride	50.0	48.5		ug/L		97	65 - 125
trans-1,2-Dichloroethene	50.0	48.6		ug/L		97	70 - 124
1,1-Dichloroethane	50.0	48.4		ug/L		97	68 - 121
cis-1,2-Dichloroethene	50.0	50.3		ug/L		101	70 - 120
Methyl Ethyl Ketone	50.0	50.0		ug/L		100	54 - 138
Chloroform	50.0	47.0		ug/L		94	70 - 120
1,1,1-Trichloroethane	50.0	47.4		ug/L		95	70 - 123
Carbon tetrachloride	50.0	50.8		ug/L		102	70 - 125
1,2-Dichloroethane	50.0	47.7		ug/L		95	69 - 120
Trichloroethene	50.0	50.5		ug/L		101	70 - 120
1,2-Dichloropropane	50.0	50.7		ug/L		101	70 - 120
Bromodichloromethane	50.0	51.3		ug/L		103	70 - 120
cis-1,3-Dichloropropene	50.0	53.9		ug/L		108	70 - 120
methyl isobutyl ketone	50.0	51.8		ug/L		104	59 - 135
Toluene	50.0	52.3		ug/L		105	70 - 120
trans-1,3-Dichloropropene	50.0	52.4		ug/L		105	70 - 120
1,1,2-Trichloroethane	50.0	50.8		ug/L		102	69 - 120
Tetrachloroethene	50.0	47.4		ug/L		95	70 - 123
2-Hexanone	50.0	43.7		ug/L		87	55 - 144
Dibromochloromethane	50.0	50.1		ug/L		100	70 - 120
Chlorobenzene	50.0	49.1		ug/L		98	70 - 120
Ethylbenzene	50.0	51.2		ug/L		102	75 - 120
Styrene	50.0	53.1		ug/L		106	75 - 120
Bromoform	50.0	49.0		ug/L		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	48.4		ug/L		97	70 - 128
Xylenes, Total	100	102		ug/L		102	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		75 - 125
Toluene-d8 (Surr)	106		75 - 120
4-Bromofluorobenzene (Surr)	105		75 - 120
Dibromofluoromethane	100		75 - 120

Lab Sample ID: 500-68720-4 MS

Matrix: Water

Analysis Batch: 216908

Client Sample ID: IPC GW MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<5.0		50.0	51.5		ug/L		103	70 - 120
Chloromethane	<5.0		50.0	47.7		ug/L		95	50 - 134
Vinyl chloride	11		50.0	60.1		ug/L		98	62 - 138
Bromomethane	<5.0		50.0	40.9		ug/L		82	50 - 150

TestAmerica Chicago

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-68720-4 MS

Matrix: Water

Analysis Batch: 216908

Client Sample ID: IPC GW MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	<5.0		50.0	54.7		ug/L		109	50 - 150
1,1-Dichloroethene	10		50.0	58.5		ug/L		97	58 - 122
Carbon disulfide	<5.0		50.0	48.5		ug/L		97	50 - 120
Acetone	<20		50.0	43.1		ug/L		86	46 - 153
Methylene Chloride	<10		50.0	49.9		ug/L		100	65 - 125
trans-1,2-Dichloroethene	<5.0		50.0	51.0		ug/L		100	70 - 124
1,1-Dichloroethane	7.2		50.0	57.4		ug/L		100	68 - 121
cis-1,2-Dichloroethene	64		50.0	112		ug/L		97	70 - 120
Methyl Ethyl Ketone	<20		50.0	48.7		ug/L		97	54 - 138
Chloroform	<5.0		50.0	50.5		ug/L		101	70 - 120
1,1,1-Trichloroethane	12		50.0	62.8		ug/L		102	70 - 123
Carbon tetrachloride	<5.0		50.0	55.4		ug/L		111	70 - 125
1,2-Dichloroethane	<5.0		50.0	49.8		ug/L		100	69 - 120
Trichloroethene	81		50.0	132		ug/L		101	70 - 120
1,2-Dichloropropane	<5.0		50.0	52.8		ug/L		106	70 - 120
Bromodichloromethane	<5.0		50.0	53.8		ug/L		108	70 - 120
cis-1,3-Dichloropropene	<5.0		50.0	52.7		ug/L		105	70 - 120
methyl isobutyl ketone	<20		50.0	50.5		ug/L		101	59 - 135
Toluene	<5.0		50.0	54.6		ug/L		109	70 - 120
trans-1,3-Dichloropropene	<5.0		50.0	53.1		ug/L		106	70 - 120
1,1,2-Trichloroethane	<5.0		50.0	53.3		ug/L		107	69 - 120
Tetrachloroethene	28		50.0	79.7		ug/L		103	70 - 123
2-Hexanone	<20		50.0	47.6		ug/L		95	55 - 144
Dibromochloromethane	<5.0		50.0	54.2		ug/L		108	70 - 120
Chlorobenzene	<5.0		50.0	53.2		ug/L		106	70 - 120
Ethylbenzene	<5.0		50.0	55.5		ug/L		111	75 - 120
Styrene	<5.0		50.0	56.6		ug/L		113	75 - 120
Bromoform	<5.0		50.0	50.9		ug/L		102	70 - 125
1,1,2,2-Tetrachloroethane	<5.0		50.0	50.8		ug/L		102	70 - 128
Xylenes, Total	<5.0		100	111		ug/L		111	70 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		75 - 125
Toluene-d8 (Surr)	106		75 - 120
4-Bromofluorobenzene (Surr)	105		75 - 120
Dibromofluoromethane	100		75 - 120

Lab Sample ID: 500-68720-4 MSD

Matrix: Water

Analysis Batch: 216908

Client Sample ID: IPC GW MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<5.0		50.0	50.8		ug/L		102	70 - 120	1	20
Chloromethane	<5.0		50.0	47.0		ug/L		94	50 - 134	1	20
Vinyl chloride	11		50.0	60.6		ug/L		100	62 - 138	1	20
Bromomethane	<5.0		50.0	42.8		ug/L		86	50 - 150	5	20
Chloroethane	<5.0		50.0	55.4		ug/L		111	50 - 150	1	20
1,1-Dichloroethene	10		50.0	57.0		ug/L		94	58 - 122	3	20

TestAmerica Chicago

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-68720-4 MSD

Matrix: Water

Analysis Batch: 216908

Client Sample ID: IPC GW MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide	<5.0		50.0	47.3		ug/L		95	50 - 120	3	20
Acetone	<20		50.0	43.4		ug/L		87	46 - 153	1	20
Methylene Chloride	<10		50.0	48.2		ug/L		96	65 - 125	3	20
trans-1,2-Dichloroethene	<5.0		50.0	49.4		ug/L		97	70 - 124	3	20
1,1-Dichloroethane	7.2		50.0	56.4		ug/L		98	68 - 121	2	20
cis-1,2-Dichloroethene	64		50.0	113		ug/L		98	70 - 120	1	20
Methyl Ethyl Ketone	<20		50.0	46.9		ug/L		94	54 - 138	4	20
Chloroform	<5.0		50.0	48.5		ug/L		97	70 - 120	4	20
1,1,1-Trichloroethane	12		50.0	62.0		ug/L		100	70 - 123	1	20
Carbon tetrachloride	<5.0		50.0	53.0		ug/L		106	70 - 125	4	20
1,2-Dichloroethane	<5.0		50.0	47.9		ug/L		96	69 - 120	4	20
Trichloroethene	81		50.0	133		ug/L		103	70 - 120	1	20
1,2-Dichloropropane	<5.0		50.0	51.0		ug/L		102	70 - 120	3	20
Bromodichloromethane	<5.0		50.0	51.4		ug/L		103	70 - 120	5	20
cis-1,3-Dichloropropene	<5.0		50.0	50.8		ug/L		102	70 - 120	4	20
methyl isobutyl ketone	<20		50.0	48.6		ug/L		97	59 - 135	4	20
Toluene	<5.0		50.0	52.6		ug/L		105	70 - 120	4	20
trans-1,3-Dichloropropene	<5.0		50.0	50.7		ug/L		101	70 - 120	5	20
1,1,2-Trichloroethane	<5.0		50.0	51.0		ug/L		102	69 - 120	4	20
Tetrachloroethene	28		50.0	77.4		ug/L		99	70 - 123	3	20
2-Hexanone	<20		50.0	42.9		ug/L		86	55 - 144	10	20
Dibromochloromethane	<5.0		50.0	51.0		ug/L		102	70 - 120	6	20
Chlorobenzene	<5.0		50.0	50.9		ug/L		102	70 - 120	4	20
Ethylbenzene	<5.0		50.0	53.5		ug/L		107	75 - 120	4	20
Styrene	<5.0		50.0	54.0		ug/L		108	75 - 120	5	20
Bromoform	<5.0		50.0	48.9		ug/L		98	70 - 125	4	20
1,1,2,2-Tetrachloroethane	<5.0		50.0	48.4		ug/L		97	70 - 128	5	20
Xylenes, Total	<5.0		100	106		ug/L		106	70 - 120	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		75 - 125
Toluene-d8 (Surr)	106		75 - 120
4-Bromofluorobenzene (Surr)	106		75 - 120
Dibromofluoromethane	100		75 - 120

Lab Sample ID: MB 500-216976/6

Matrix: Water

Analysis Batch: 216976

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			12/19/13 22:32	1
Chloromethane	<5.0		5.0	0.18	ug/L			12/19/13 22:32	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			12/19/13 22:32	1
Bromomethane	<5.0		5.0	0.31	ug/L			12/19/13 22:32	1
Chloroethane	<5.0		5.0	0.34	ug/L			12/19/13 22:32	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			12/19/13 22:32	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			12/19/13 22:32	1
Acetone	<20		20	1.3	ug/L			12/19/13 22:32	1

TestAmerica Chicago

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-216976/6

Matrix: Water

Analysis Batch: 216976

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<10		10	0.68	ug/L			12/19/13 22:32	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			12/19/13 22:32	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			12/19/13 22:32	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			12/19/13 22:32	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			12/19/13 22:32	1
Chloroform	<5.0		5.0	0.20	ug/L			12/19/13 22:32	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			12/19/13 22:32	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			12/19/13 22:32	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 22:32	1
Trichloroethene	<5.0		5.0	0.19	ug/L			12/19/13 22:32	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			12/19/13 22:32	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			12/19/13 22:32	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			12/19/13 22:32	1
methyl isobutyl ketone	<20		20	0.33	ug/L			12/19/13 22:32	1
Toluene	<5.0		5.0	0.11	ug/L			12/19/13 22:32	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			12/19/13 22:32	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			12/19/13 22:32	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			12/19/13 22:32	1
2-Hexanone	<20		20	0.56	ug/L			12/19/13 22:32	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			12/19/13 22:32	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			12/19/13 22:32	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			12/19/13 22:32	1
Styrene	<5.0		5.0	0.10	ug/L			12/19/13 22:32	1
Bromoform	<5.0		5.0	0.28	ug/L			12/19/13 22:32	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			12/19/13 22:32	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			12/19/13 22:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125		12/19/13 22:32	1
Toluene-d8 (Surr)	108		75 - 120		12/19/13 22:32	1
4-Bromofluorobenzene (Surr)	98		75 - 120		12/19/13 22:32	1
Dibromofluoromethane	103		75 - 120		12/19/13 22:32	1

Lab Sample ID: LCS 500-216976/4

Matrix: Water

Analysis Batch: 216976

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.1		ug/L		102	70 - 120
Chloromethane	50.0	49.4		ug/L		99	50 - 134
Vinyl chloride	50.0	50.9		ug/L		102	62 - 138
Bromomethane	50.0	44.4		ug/L		89	50 - 150
Chloroethane	50.0	56.1		ug/L		112	50 - 150
1,1-Dichloroethene	50.0	48.3		ug/L		97	58 - 122
Carbon disulfide	50.0	47.4		ug/L		95	50 - 120
Acetone	50.0	45.2		ug/L		90	46 - 153
Methylene Chloride	50.0	48.9		ug/L		98	65 - 125
trans-1,2-Dichloroethene	50.0	50.1		ug/L		100	70 - 124

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QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-216976/4

Matrix: Water

Analysis Batch: 216976

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	50.4		ug/L		101	68 - 121
cis-1,2-Dichloroethane	50.0	50.5		ug/L		101	70 - 120
Methyl Ethyl Ketone	50.0	52.7		ug/L		105	54 - 138
Chloroform	50.0	49.2		ug/L		98	70 - 120
1,1,1-Trichloroethane	50.0	50.6		ug/L		101	70 - 123
Carbon tetrachloride	50.0	53.1		ug/L		106	70 - 125
1,2-Dichloroethane	50.0	47.4		ug/L		95	69 - 120
Trichloroethene	50.0	53.0		ug/L		106	70 - 120
1,2-Dichloropropane	50.0	52.3		ug/L		105	70 - 120
Bromodichloromethane	50.0	52.9		ug/L		106	70 - 120
cis-1,3-Dichloropropene	50.0	54.0		ug/L		108	70 - 120
methyl isobutyl ketone	50.0	52.0		ug/L		104	59 - 135
Toluene	50.0	53.9		ug/L		108	70 - 120
trans-1,3-Dichloropropene	50.0	53.3		ug/L		107	70 - 120
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	69 - 120
Tetrachloroethene	50.0	50.7		ug/L		101	70 - 123
2-Hexanone	50.0	49.7		ug/L		99	55 - 144
Dibromochloromethane	50.0	53.7		ug/L		107	70 - 120
Chlorobenzene	50.0	52.4		ug/L		105	70 - 120
Ethylbenzene	50.0	54.2		ug/L		108	75 - 120
Styrene	50.0	55.6		ug/L		111	75 - 120
Bromoform	50.0	50.8		ug/L		102	70 - 125
1,1,2,2-Tetrachloroethane	50.0	50.7		ug/L		101	70 - 128
Xylenes, Total	100	109		ug/L		109	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		75 - 125
Toluene-d8 (Surr)	107		75 - 120
4-Bromofluorobenzene (Surr)	102		75 - 120
Dibromofluoromethane	99		75 - 120

Lab Chronicle

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW8

Date Collected: 12/16/13 10:10

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216908	12/19/13 16:37	BDA	TAL CHI

Client Sample ID: IPC GW MW9

Date Collected: 12/16/13 10:28

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216908	12/19/13 17:01	BDA	TAL CHI

Client Sample ID: IPC GW MW7

Date Collected: 12/16/13 11:00

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216908	12/19/13 17:26	BDA	TAL CHI

Client Sample ID: IPC GW MW6

Date Collected: 12/16/13 12:37

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216908	12/19/13 17:51	BDA	TAL CHI

Client Sample ID: IPC GW MW5

Date Collected: 12/16/13 13:23

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216908	12/19/13 18:16	BDA	TAL CHI

Client Sample ID: IPC GW MW4

Date Collected: 12/16/13 13:57

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216908	12/19/13 18:40	BDA	TAL CHI

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Lab Chronicle

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Client Sample ID: IPC GW MW3

Date Collected: 12/16/13 14:30

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216976	12/19/13 22:57	BDA	TAL CHI

Client Sample ID: IPC GW MW2

Date Collected: 12/16/13 15:00

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216976	12/19/13 23:46	BDA	TAL CHI

Client Sample ID: IPC GW MW1

Date Collected: 12/16/13 15:26

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216976	12/20/13 00:36	BDA	TAL CHI

Client Sample ID: F.B.

Date Collected: 12/16/13 15:45

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216976	12/20/13 01:00	BDA	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 12/16/13 00:00

Date Received: 12/17/13 10:30

Lab Sample ID: 500-68720-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	216908	12/19/13 19:05	BDA	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-68720-1

Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-14
Kentucky	State Program	4	90023	12-31-13
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-13 *
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-14
South Carolina	State Program	4	77001	04-30-14
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-14
Wyoming	State Program	8	8TMS-Q	04-30-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Chicago

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL
Phone: 708.534.5200 Fax: 708.5



500-68720 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-68720
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 3.8

Client		Project Name		Preservative																Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Location/State		Lab Project #		Parameter																		
Sample		Lab PM																				
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix																Comments
1		IPC GW MW 8	12-16-13	1010	3	W																
2		IPC GW MW 9		1028	1																	
3		IPC GW MW 7		1100	1																	
4	X	IPC GW MW 6		1237	9																	
5		IPC GW MW 5		1323	1																	
6		IPC GW MW 4		1357	1																	
7		IPC GW MW 3		1430	1																	
8		IPC GW MW 2		1500	1																	
9		IPC GW MW 1		1526	1																	
10		F.B.		1545	1																	

Round Trip Blank

Round Time Required (Business Days)
1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

☐ Return to Client

☐ Disposal by Lab

☐ Archive for _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Added by TA

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<i>[Signature]</i>	Cabeno	12-16-13	1630	<i>[Signature]</i>	TA-CH	12/17/13	1030
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier

Shipped

Hand Delivered

Matrix Key

WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Environmental Information Logistics (EIL)

Job Number: 500-68720-1

Login Number: 68720

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-69823-1

Client Project/Site: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)

405 Ritsher Street

Beloit, Wisconsin 53511

Attn: Ms. Mary Pearson



Authorized for release by:

1/14/2014 10:09:26 AM

Richard Wright, Senior Project Manager

(708)534-5200

richard.wright@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Job ID: 500-69823-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-69823-1

Comments

No additional comments.

Receipt

The samples were received on 1/10/2014 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

GC/MS VOA

No analytical or quality issues were noted.

Detection Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Client Sample ID: IPC GW MW8

Lab Sample ID: 500-69823-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	10		1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: IPC GW DUP

Lab Sample ID: 500-69823-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	11		1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: IPC FB

Lab Sample ID: 500-69823-3

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 500-69823-4

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-69823-1	IPC GW MW8	Water	01/09/14 12:03	01/10/14 10:45
500-69823-2	IPC GW DUP	Water	01/09/14 12:08	01/10/14 10:45
500-69823-3	IPC FB	Water	01/09/14 12:35	01/10/14 10:45
500-69823-4	Trip Blank	Water	01/09/14 00:00	01/10/14 10:45

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Client Sample ID: IPC GW MW8

Lab Sample ID: 500-69823-1

Date Collected: 01/09/14 12:03

Matrix: Water

Date Received: 01/10/14 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	10		1.0	0.19	ug/L			01/13/14 10:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 125					01/13/14 10:59	1
Toluene-d8 (Surr)	109		75 - 120					01/13/14 10:59	1
4-Bromofluorobenzene (Surr)	98		75 - 120					01/13/14 10:59	1
Dibromofluoromethane	103		75 - 120					01/13/14 10:59	1

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Client Sample ID: IPC GW DUP

Lab Sample ID: 500-69823-2

Date Collected: 01/09/14 12:08

Matrix: Water

Date Received: 01/10/14 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	11		1.0	0.19	ug/L			01/13/14 11:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 125					01/13/14 11:24	1
Toluene-d8 (Surr)	110		75 - 120					01/13/14 11:24	1
4-Bromofluorobenzene (Surr)	98		75 - 120					01/13/14 11:24	1
Dibromofluoromethane	104		75 - 120					01/13/14 11:24	1

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Client Sample ID: IPC FB

Date Collected: 01/09/14 12:35

Date Received: 01/10/14 10:45

Lab Sample ID: 500-69823-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.0		1.0	0.19	ug/L			01/13/14 11:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 125					01/13/14 11:48	1
Toluene-d8 (Surr)	107		75 - 120					01/13/14 11:48	1
4-Bromofluorobenzene (Surr)	96		75 - 120					01/13/14 11:48	1
Dibromofluoromethane	101		75 - 120					01/13/14 11:48	1

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Client Sample ID: Trip Blank

Date Collected: 01/09/14 00:00

Date Received: 01/10/14 10:45

Lab Sample ID: 500-69823-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.0		1.0	0.19	ug/L			01/13/14 12:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 125					01/13/14 12:13	1
Toluene-d8 (Surr)	108		75 - 120					01/13/14 12:13	1
4-Bromofluorobenzene (Surr)	97		75 - 120					01/13/14 12:13	1
Dibromofluoromethane	102		75 - 120					01/13/14 12:13	1

Definitions/Glossary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

GC/MS VOA

Analysis Batch: 219474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-69823-1	IPC GW MW8	Total/NA	Water	8260B	
500-69823-2	IPC GW DUP	Total/NA	Water	8260B	
500-69823-3	IPC FB	Total/NA	Water	8260B	
500-69823-4	Trip Blank	Total/NA	Water	8260B	
LCS 500-219474/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-219474/6	Method Blank	Total/NA	Water	8260B	

Surrogate Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-125)	TOL (75-120)	BFB (75-120)	DBFM (75-120)
500-69823-1	IPC GW MW8	102	109	98	103
500-69823-2	IPC GW DUP	101	110	98	104
500-69823-3	IPC FB	101	107	96	101
500-69823-4	Trip Blank	101	108	97	102
LCS 500-219474/4	Lab Control Sample	98	107	103	99
MB 500-219474/6	Method Blank	106	108	97	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-219474/6

Matrix: Water

Analysis Batch: 219474

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.0		1.0	0.19	ug/L			01/13/14 10:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 125					01/13/14 10:10	1
Toluene-d8 (Surr)	108		75 - 120					01/13/14 10:10	1
4-Bromofluorobenzene (Surr)	97		75 - 120					01/13/14 10:10	1
Dibromofluoromethane	106		75 - 120					01/13/14 10:10	1

Lab Sample ID: LCS 500-219474/4

Matrix: Water

Analysis Batch: 219474

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	45.0		ug/L		90	68 - 121
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	98		75 - 125				
Toluene-d8 (Surr)	107		75 - 120				
4-Bromofluorobenzene (Surr)	103		75 - 120				
Dibromofluoromethane	99		75 - 120				

Lab Chronicle

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Client Sample ID: IPC GW MW8

Date Collected: 01/09/14 12:03

Date Received: 01/10/14 10:45

Lab Sample ID: 500-69823-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219474	01/13/14 10:59	BDA	TAL CHI

Client Sample ID: IPC GW DUP

Date Collected: 01/09/14 12:08

Date Received: 01/10/14 10:45

Lab Sample ID: 500-69823-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219474	01/13/14 11:24	BDA	TAL CHI

Client Sample ID: IPC FB

Date Collected: 01/09/14 12:35

Date Received: 01/10/14 10:45

Lab Sample ID: 500-69823-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219474	01/13/14 11:48	BDA	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 01/09/14 00:00

Date Received: 01/10/14 10:45

Lab Sample ID: 500-69823-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219474	01/13/14 12:13	BDA	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-69823-1

Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-14
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-14
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-14
South Carolina	State Program	4	77001	04-30-14
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-14
Wyoming	State Program	8	8TMS-Q	04-30-14

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534



500-69823 COC

Report To _____ (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To _____ (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-69823
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 4.2

Client <u>IPC</u>		Client Project # _____		Preservative																Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name <u>IPC</u>				Parameter																	
Project Location/State <u>Rockford IL</u>		Lab Project # <u>50001225</u>																			
Sampler <u>Brian McQueen</u>		Lab PM _____																			
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix															Comments
		<u>IPC MW B²</u>	<u>1-9-14</u>																		
<u>1</u>		<u>IPC GW MW8</u>	<u>↓</u>	<u>1203</u>	<u>2</u>	<u>GW</u>															
<u>2</u>		<u>IPC GW Dup</u>	<u>↓</u>	<u>1208</u>	<u>↓</u>	<u>↓</u>															
<u>3</u>		<u>IPC FB</u>	<u>↓</u>	<u>1235</u>	<u>↓</u>	<u>↓</u>															
<u>4</u>		<u>Tr.p Blank</u>																			<u>added by TA</u>

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Requested Due Date _____

Sample Disposal

☐ Return to Client

☐ Disposal by Lab

☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u>	Company <u>Cabeno</u>	Date <u>1-9-14</u>	Time <u>1300</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>1/10/14</u>	Time <u>1045</u>
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____

Lab Courier _____
Shipped FX
Hand Delivered _____

Matrix Key
WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Environmental Information Logistics (EIL)

Job Number: 500-69823-1

Login Number: 69823

List Source: TestAmerica Chicago

List Number: 1

Creator: Lunt, Jeff T

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	4.2
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-79349-1

Client Project/Site: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)

405 Ritsher Street

Beloit, Wisconsin 53511

Attn: Ms. Mary Pearson



Authorized for release by:

6/27/2014 2:42:08 PM

Richard Wright, Senior Project Manager

(708)534-5200

richard.wright@testamericainc.com

LINKS

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results through

TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Job ID: 500-79349-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-79349-1

Comments

No additional comments.

Receipt

The samples were received on 6/24/2014 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW1

Lab Sample ID: 500-79349-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	17		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	9.7		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	14		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	160		5.0	0.12	ug/L	1		8260B	Total/NA
Trichloroethene	16		5.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: MW2

Lab Sample ID: 500-79349-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	11		5.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	31		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	10		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	180		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	31		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: MW3

Lab Sample ID: 500-79349-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	11		5.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	26		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	11		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	200		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	38		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: MW4

Lab Sample ID: 500-79349-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	20		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	15		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	34		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	6.3		5.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: MW5

Lab Sample ID: 500-79349-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	13		5.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	27		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	12		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	140		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	43		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: MW6

Lab Sample ID: 500-79349-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	11		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	11		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	12		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	38		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	13		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	140		5.0	0.19	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW6 (Continued)

Lab Sample ID: 500-79349-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	49		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: MW7

Lab Sample ID: 500-79349-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	17		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	9.5		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	14		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	160		5.0	0.12	ug/L	1		8260B	Total/NA
Trichloroethene	15		5.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: MW8

Lab Sample ID: 500-79349-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	8.9		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	14		5.0	0.12	ug/L	1		8260B	Total/NA
Trichloroethene	47		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	10		5.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: MW9

Lab Sample ID: 500-79349-9

No Detections.

Client Sample ID: FB

Lab Sample ID: 500-79349-10

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 500-79349-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-79349-1	MW1	Water	06/23/14 15:00	06/24/14 10:10
500-79349-2	MW2	Water	06/23/14 14:30	06/24/14 10:10
500-79349-3	MW3	Water	06/23/14 14:00	06/24/14 10:10
500-79349-4	MW4	Water	06/23/14 13:30	06/24/14 10:10
500-79349-5	MW5	Water	06/23/14 12:59	06/24/14 10:10
500-79349-6	MW6	Water	06/23/14 12:30	06/24/14 10:10
500-79349-7	MW7	Water	06/23/14 11:45	06/24/14 10:10
500-79349-8	MW8	Water	06/23/14 11:10	06/24/14 10:10
500-79349-9	MW9	Water	06/23/14 11:23	06/24/14 10:10
500-79349-10	FB	Water	06/23/14 00:00	06/24/14 10:10
500-79349-11	Trip Blank	Water	06/23/14 00:00	06/24/14 10:10

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW1

Lab Sample ID: 500-79349-1

Date Collected: 06/23/14 15:00

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 15:27	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 15:27	1
Vinyl chloride	17		2.0	0.10	ug/L			06/26/14 15:27	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 15:27	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 15:27	1
1,1-Dichloroethene	9.7		5.0	0.31	ug/L			06/26/14 15:27	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 15:27	1
Acetone	<20		20	1.3	ug/L			06/26/14 15:27	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 15:27	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 15:27	1
1,1-Dichloroethane	14		5.0	0.19	ug/L			06/26/14 15:27	1
cis-1,2-Dichloroethene	160		5.0	0.12	ug/L			06/26/14 15:27	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 15:27	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 15:27	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/26/14 15:27	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 15:27	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 15:27	1
Trichloroethene	16		5.0	0.19	ug/L			06/26/14 15:27	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 15:27	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 15:27	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 15:27	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 15:27	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 15:27	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 15:27	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 15:27	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/26/14 15:27	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 15:27	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 15:27	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 15:27	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 15:27	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 15:27	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 15:27	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 15:27	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 125		06/26/14 15:27	1
Toluene-d8 (Surr)	99		75 - 120		06/26/14 15:27	1
4-Bromofluorobenzene (Surr)	91		75 - 120		06/26/14 15:27	1
Dibromofluoromethane	97		75 - 120		06/26/14 15:27	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW2

Date Collected: 06/23/14 14:30

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 15:52	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 15:52	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 15:52	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 15:52	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 15:52	1
1,1-Dichloroethene	11		5.0	0.31	ug/L			06/26/14 15:52	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 15:52	1
Acetone	<20		20	1.3	ug/L			06/26/14 15:52	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 15:52	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 15:52	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/26/14 15:52	1
cis-1,2-Dichloroethene	31		5.0	0.12	ug/L			06/26/14 15:52	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 15:52	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 15:52	1
1,1,1-Trichloroethane	10		5.0	0.20	ug/L			06/26/14 15:52	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 15:52	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 15:52	1
Trichloroethene	180		5.0	0.19	ug/L			06/26/14 15:52	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 15:52	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 15:52	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 15:52	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 15:52	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 15:52	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 15:52	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 15:52	1
Tetrachloroethene	31		5.0	0.17	ug/L			06/26/14 15:52	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 15:52	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 15:52	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 15:52	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 15:52	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 15:52	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 15:52	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 15:52	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 125		06/26/14 15:52	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 15:52	1
4-Bromofluorobenzene (Surr)	91		75 - 120		06/26/14 15:52	1
Dibromofluoromethane	96		75 - 120		06/26/14 15:52	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW3

Lab Sample ID: 500-79349-3

Date Collected: 06/23/14 14:00

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 16:17	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 16:17	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 16:17	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 16:17	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 16:17	1
1,1-Dichloroethene	11		5.0	0.31	ug/L			06/26/14 16:17	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 16:17	1
Acetone	<20		20	1.3	ug/L			06/26/14 16:17	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 16:17	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 16:17	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/26/14 16:17	1
cis-1,2-Dichloroethene	26		5.0	0.12	ug/L			06/26/14 16:17	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 16:17	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 16:17	1
1,1,1-Trichloroethane	11		5.0	0.20	ug/L			06/26/14 16:17	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 16:17	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 16:17	1
Trichloroethene	200		5.0	0.19	ug/L			06/26/14 16:17	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 16:17	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 16:17	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 16:17	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 16:17	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 16:17	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 16:17	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 16:17	1
Tetrachloroethene	38		5.0	0.17	ug/L			06/26/14 16:17	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 16:17	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 16:17	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 16:17	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 16:17	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 16:17	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 16:17	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 16:17	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 16:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 125		06/26/14 16:17	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 16:17	1
4-Bromofluorobenzene (Surr)	91		75 - 120		06/26/14 16:17	1
Dibromofluoromethane	97		75 - 120		06/26/14 16:17	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW4

Lab Sample ID: 500-79349-4

Date Collected: 06/23/14 13:30

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 16:42	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 16:42	1
Vinyl chloride	20		2.0	0.10	ug/L			06/26/14 16:42	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 16:42	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 16:42	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/26/14 16:42	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 16:42	1
Acetone	<20		20	1.3	ug/L			06/26/14 16:42	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 16:42	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 16:42	1
1,1-Dichloroethane	15		5.0	0.19	ug/L			06/26/14 16:42	1
cis-1,2-Dichloroethene	34		5.0	0.12	ug/L			06/26/14 16:42	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 16:42	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 16:42	1
1,1,1-Trichloroethane	6.3		5.0	0.20	ug/L			06/26/14 16:42	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 16:42	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 16:42	1
Trichloroethene	<5.0		5.0	0.19	ug/L			06/26/14 16:42	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 16:42	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 16:42	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 16:42	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 16:42	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 16:42	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 16:42	1
1,1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 16:42	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/26/14 16:42	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 16:42	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 16:42	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 16:42	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 16:42	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 16:42	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 16:42	1
1,1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 16:42	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 125		06/26/14 16:42	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 16:42	1
4-Bromofluorobenzene (Surr)	91		75 - 120		06/26/14 16:42	1
Dibromofluoromethane	97		75 - 120		06/26/14 16:42	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW5

Lab Sample ID: 500-79349-5

Date Collected: 06/23/14 12:59

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 17:07	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 17:07	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 17:07	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 17:07	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 17:07	1
1,1-Dichloroethene	13		5.0	0.31	ug/L			06/26/14 17:07	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 17:07	1
Acetone	<20		20	1.3	ug/L			06/26/14 17:07	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 17:07	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 17:07	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/26/14 17:07	1
cis-1,2-Dichloroethene	27		5.0	0.12	ug/L			06/26/14 17:07	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 17:07	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 17:07	1
1,1,1-Trichloroethane	12		5.0	0.20	ug/L			06/26/14 17:07	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 17:07	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 17:07	1
Trichloroethene	140		5.0	0.19	ug/L			06/26/14 17:07	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 17:07	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 17:07	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 17:07	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 17:07	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 17:07	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 17:07	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 17:07	1
Tetrachloroethene	43		5.0	0.17	ug/L			06/26/14 17:07	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 17:07	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 17:07	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 17:07	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 17:07	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 17:07	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 17:07	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 17:07	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 125		06/26/14 17:07	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 17:07	1
4-Bromofluorobenzene (Surr)	90		75 - 120		06/26/14 17:07	1
Dibromofluoromethane	97		75 - 120		06/26/14 17:07	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW6

Lab Sample ID: 500-79349-6

Date Collected: 06/23/14 12:30

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 17:32	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 17:32	1
Vinyl chloride	11		2.0	0.10	ug/L			06/26/14 17:32	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 17:32	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 17:32	1
1,1-Dichloroethene	11		5.0	0.31	ug/L			06/26/14 17:32	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 17:32	1
Acetone	<20		20	1.3	ug/L			06/26/14 17:32	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 17:32	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 17:32	1
1,1-Dichloroethane	12		5.0	0.19	ug/L			06/26/14 17:32	1
cis-1,2-Dichloroethene	38		5.0	0.12	ug/L			06/26/14 17:32	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 17:32	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 17:32	1
1,1,1-Trichloroethane	13		5.0	0.20	ug/L			06/26/14 17:32	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 17:32	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 17:32	1
Trichloroethene	140		5.0	0.19	ug/L			06/26/14 17:32	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 17:32	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 17:32	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 17:32	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 17:32	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 17:32	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 17:32	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 17:32	1
Tetrachloroethene	49		5.0	0.17	ug/L			06/26/14 17:32	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 17:32	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 17:32	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 17:32	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 17:32	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 17:32	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 17:32	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 17:32	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 125		06/26/14 17:32	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 17:32	1
4-Bromofluorobenzene (Surr)	90		75 - 120		06/26/14 17:32	1
Dibromofluoromethane	97		75 - 120		06/26/14 17:32	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW7

Lab Sample ID: 500-79349-7

Date Collected: 06/23/14 11:45

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 17:56	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 17:56	1
Vinyl chloride	17		2.0	0.10	ug/L			06/26/14 17:56	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 17:56	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 17:56	1
1,1-Dichloroethene	9.5		5.0	0.31	ug/L			06/26/14 17:56	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 17:56	1
Acetone	<20		20	1.3	ug/L			06/26/14 17:56	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 17:56	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 17:56	1
1,1-Dichloroethane	14		5.0	0.19	ug/L			06/26/14 17:56	1
cis-1,2-Dichloroethene	160		5.0	0.12	ug/L			06/26/14 17:56	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 17:56	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 17:56	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/26/14 17:56	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 17:56	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 17:56	1
Trichloroethene	15		5.0	0.19	ug/L			06/26/14 17:56	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 17:56	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 17:56	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 17:56	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 17:56	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 17:56	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 17:56	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 17:56	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/26/14 17:56	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 17:56	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 17:56	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 17:56	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 17:56	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 17:56	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 17:56	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 17:56	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 125		06/26/14 17:56	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 17:56	1
4-Bromofluorobenzene (Surr)	94		75 - 120		06/26/14 17:56	1
Dibromofluoromethane	96		75 - 120		06/26/14 17:56	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW8

Lab Sample ID: 500-79349-8

Date Collected: 06/23/14 11:10

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 18:21	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 18:21	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 18:21	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 18:21	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 18:21	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/26/14 18:21	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 18:21	1
Acetone	<20		20	1.3	ug/L			06/26/14 18:21	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 18:21	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 18:21	1
1,1-Dichloroethane	8.9		5.0	0.19	ug/L			06/26/14 18:21	1
cis-1,2-Dichloroethene	14		5.0	0.12	ug/L			06/26/14 18:21	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 18:21	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 18:21	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/26/14 18:21	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 18:21	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 18:21	1
Trichloroethene	47		5.0	0.19	ug/L			06/26/14 18:21	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 18:21	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 18:21	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 18:21	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 18:21	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 18:21	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 18:21	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 18:21	1
Tetrachloroethene	10		5.0	0.17	ug/L			06/26/14 18:21	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 18:21	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 18:21	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 18:21	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 18:21	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 18:21	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 18:21	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 18:21	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 18:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 125		06/26/14 18:21	1
Toluene-d8 (Surr)	99		75 - 120		06/26/14 18:21	1
4-Bromofluorobenzene (Surr)	95		75 - 120		06/26/14 18:21	1
Dibromofluoromethane	95		75 - 120		06/26/14 18:21	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW9

Lab Sample ID: 500-79349-9

Date Collected: 06/23/14 11:23

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 18:46	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 18:46	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 18:46	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 18:46	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 18:46	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/26/14 18:46	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 18:46	1
Acetone	<20		20	1.3	ug/L			06/26/14 18:46	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 18:46	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 18:46	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/26/14 18:46	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			06/26/14 18:46	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 18:46	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 18:46	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/26/14 18:46	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 18:46	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 18:46	1
Trichloroethene	<5.0		5.0	0.19	ug/L			06/26/14 18:46	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 18:46	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 18:46	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 18:46	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 18:46	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 18:46	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 18:46	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 18:46	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/26/14 18:46	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 18:46	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 18:46	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 18:46	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 18:46	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 18:46	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 18:46	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 18:46	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 125		06/26/14 18:46	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 18:46	1
4-Bromofluorobenzene (Surr)	91		75 - 120		06/26/14 18:46	1
Dibromofluoromethane	97		75 - 120		06/26/14 18:46	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: FB

Lab Sample ID: 500-79349-10

Date Collected: 06/23/14 00:00

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 19:11	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 19:11	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 19:11	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 19:11	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 19:11	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/26/14 19:11	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 19:11	1
Acetone	<20		20	1.3	ug/L			06/26/14 19:11	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 19:11	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 19:11	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/26/14 19:11	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			06/26/14 19:11	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 19:11	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 19:11	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/26/14 19:11	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 19:11	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 19:11	1
Trichloroethene	<5.0		5.0	0.19	ug/L			06/26/14 19:11	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 19:11	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 19:11	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 19:11	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 19:11	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 19:11	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 19:11	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 19:11	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/26/14 19:11	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 19:11	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 19:11	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 19:11	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 19:11	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 19:11	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 19:11	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 19:11	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 125		06/26/14 19:11	1
Toluene-d8 (Surr)	98		75 - 120		06/26/14 19:11	1
4-Bromofluorobenzene (Surr)	91		75 - 120		06/26/14 19:11	1
Dibromofluoromethane	94		75 - 120		06/26/14 19:11	1

TestAmerica Chicago

Client Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-79349-11

Date Collected: 06/23/14 00:00

Matrix: Water

Date Received: 06/24/14 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 19:36	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 19:36	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 19:36	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 19:36	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 19:36	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/26/14 19:36	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 19:36	1
Acetone	<20		20	1.3	ug/L			06/26/14 19:36	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 19:36	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 19:36	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/26/14 19:36	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			06/26/14 19:36	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 19:36	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 19:36	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/26/14 19:36	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 19:36	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 19:36	1
Trichloroethene	<5.0		5.0	0.19	ug/L			06/26/14 19:36	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 19:36	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 19:36	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 19:36	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 19:36	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 19:36	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 19:36	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 19:36	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/26/14 19:36	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 19:36	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 19:36	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 19:36	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 19:36	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 19:36	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 19:36	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 19:36	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 125		06/26/14 19:36	1
Toluene-d8 (Surr)	99		75 - 120		06/26/14 19:36	1
4-Bromofluorobenzene (Surr)	94		75 - 120		06/26/14 19:36	1
Dibromofluoromethane	96		75 - 120		06/26/14 19:36	1

TestAmerica Chicago

Definitions/Glossary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

GC/MS VOA

Analysis Batch: 242572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-79349-1	MW1	Total/NA	Water	8260B	
500-79349-2	MW2	Total/NA	Water	8260B	
500-79349-3	MW3	Total/NA	Water	8260B	
500-79349-4	MW4	Total/NA	Water	8260B	
500-79349-5	MW5	Total/NA	Water	8260B	
500-79349-6	MW6	Total/NA	Water	8260B	
500-79349-6 MS	MW6	Total/NA	Water	8260B	
500-79349-6 MSD	MW6	Total/NA	Water	8260B	
500-79349-7	MW7	Total/NA	Water	8260B	
500-79349-8	MW8	Total/NA	Water	8260B	
500-79349-9	MW9	Total/NA	Water	8260B	
500-79349-10	FB	Total/NA	Water	8260B	
500-79349-11	Trip Blank	Total/NA	Water	8260B	
LCS 500-242572/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-242572/6	Method Blank	Total/NA	Water	8260B	

Surrogate Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-125)	TOL (75-120)	BFB (75-120)	DBFM (75-120)
500-79349-1	MW1	96	99	91	97
500-79349-2	MW2	96	98	91	96
500-79349-3	MW3	97	98	91	97
500-79349-4	MW4	97	98	91	97
500-79349-5	MW5	97	98	90	97
500-79349-6	MW6	97	98	90	97
500-79349-6 MS	MW6	93	97	93	95
500-79349-6 MSD	MW6	92	97	92	94
500-79349-7	MW7	97	98	94	96
500-79349-8	MW8	95	99	95	95
500-79349-9	MW9	100	98	91	97
500-79349-10	FB	94	98	91	94
500-79349-11	Trip Blank	96	99	94	96
LCS 500-242572/4	Lab Control Sample	93	98	96	94
MB 500-242572/6	Method Blank	94	100	94	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-242572/6

Matrix: Water

Analysis Batch: 242572

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/26/14 10:30	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/26/14 10:30	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/26/14 10:30	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/26/14 10:30	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/26/14 10:30	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/26/14 10:30	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/26/14 10:30	1
Acetone	<20		20	1.3	ug/L			06/26/14 10:30	1
Methylene Chloride	<10		10	0.68	ug/L			06/26/14 10:30	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/26/14 10:30	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/26/14 10:30	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			06/26/14 10:30	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/26/14 10:30	1
Chloroform	<5.0		5.0	0.20	ug/L			06/26/14 10:30	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/26/14 10:30	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/26/14 10:30	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 10:30	1
Trichloroethene	<5.0		5.0	0.19	ug/L			06/26/14 10:30	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/26/14 10:30	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/26/14 10:30	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/26/14 10:30	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/26/14 10:30	1
Toluene	<5.0		5.0	0.11	ug/L			06/26/14 10:30	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/26/14 10:30	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/26/14 10:30	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/26/14 10:30	1
2-Hexanone	<20		20	0.56	ug/L			06/26/14 10:30	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/26/14 10:30	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/26/14 10:30	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/26/14 10:30	1
Styrene	<5.0		5.0	0.10	ug/L			06/26/14 10:30	1
Bromoform	<5.0		5.0	0.28	ug/L			06/26/14 10:30	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/26/14 10:30	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/26/14 10:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 125		06/26/14 10:30	1
Toluene-d8 (Surr)	100		75 - 120		06/26/14 10:30	1
4-Bromofluorobenzene (Surr)	94		75 - 120		06/26/14 10:30	1
Dibromofluoromethane	94		75 - 120		06/26/14 10:30	1

Lab Sample ID: LCS 500-242572/4

Matrix: Water

Analysis Batch: 242572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	44.7		ug/L		89	75 - 120
Chloromethane	50.0	50.7		ug/L		101	63 - 133

TestAmerica Chicago

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-242572/4

Matrix: Water

Analysis Batch: 242572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	50.0	51.4		ug/L		103	72 - 123
Bromomethane	50.0	61.8		ug/L		124	45 - 169
Chloroethane	50.0	61.3		ug/L		123	58 - 147
1,1-Dichloroethene	50.0	41.0		ug/L		82	69 - 120
Carbon disulfide	50.0	37.8		ug/L		76	56 - 130
Acetone	50.0	57.4		ug/L		115	48 - 149
Methylene Chloride	50.0	44.0		ug/L		88	73 - 130
trans-1,2-Dichloroethene	50.0	45.2		ug/L		90	77 - 120
1,1-Dichloroethane	50.0	45.1		ug/L		90	75 - 120
cis-1,2-Dichloroethene	50.0	47.3		ug/L		95	75 - 120
Methyl Ethyl Ketone	50.0	50.4		ug/L		101	53 - 142
Chloroform	50.0	45.2		ug/L		90	76 - 120
1,1,1-Trichloroethane	50.0	46.0		ug/L		92	72 - 130
Carbon tetrachloride	50.0	47.9		ug/L		96	70 - 130
1,2-Dichloroethane	50.0	45.2		ug/L		90	69 - 130
Trichloroethene	50.0	49.5		ug/L		99	75 - 120
1,2-Dichloropropane	50.0	46.9		ug/L		94	75 - 120
Bromodichloromethane	50.0	47.3		ug/L		95	77 - 121
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	78 - 130
methyl isobutyl ketone	50.0	45.2		ug/L		90	58 - 135
Toluene	50.0	46.6		ug/L		93	75 - 120
trans-1,3-Dichloropropene	50.0	46.3		ug/L		93	74 - 130
1,1,2-Trichloroethane	50.0	47.3		ug/L		95	75 - 120
Tetrachloroethene	50.0	49.6		ug/L		99	75 - 120
2-Hexanone	50.0	47.8		ug/L		96	55 - 140
Dibromochloromethane	50.0	48.7		ug/L		97	71 - 126
Chlorobenzene	50.0	48.4		ug/L		97	75 - 120
Ethylbenzene	50.0	49.9		ug/L		100	75 - 120
Styrene	50.0	48.4		ug/L		97	75 - 120
Bromoform	50.0	49.5		ug/L		99	68 - 126
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/L		91	72 - 130
Xylenes, Total	100	95.9		ug/L		96	75 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		75 - 125
Toluene-d8 (Surr)	98		75 - 120
4-Bromofluorobenzene (Surr)	96		75 - 120
Dibromofluoromethane	94		75 - 120

Lab Sample ID: 500-79349-6 MS

Matrix: Water

Analysis Batch: 242572

Client Sample ID: MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<5.0		50.0	49.3		ug/L		99	75 - 120
Chloromethane	<5.0		50.0	53.7		ug/L		107	63 - 133
Vinyl chloride	11		50.0	65.2		ug/L		108	72 - 123
Bromomethane	<5.0		50.0	66.0		ug/L		132	45 - 169

TestAmerica Chicago

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-79349-6 MS

Matrix: Water

Analysis Batch: 242572

Client Sample ID: MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	<5.0		50.0	63.2		ug/L		126	58 - 147
1,1-Dichloroethene	11		50.0	55.5		ug/L		89	69 - 120
Carbon disulfide	<5.0		50.0	40.3		ug/L		81	56 - 130
Acetone	<20		50.0	45.9		ug/L		92	48 - 149
Methylene Chloride	<10		50.0	49.0		ug/L		98	73 - 130
trans-1,2-Dichloroethene	<5.0		50.0	49.6		ug/L		97	77 - 120
1,1-Dichloroethane	12		50.0	62.0		ug/L		100	75 - 120
cis-1,2-Dichloroethene	38		50.0	88.9		ug/L		102	75 - 120
Methyl Ethyl Ketone	<20		50.0	51.1		ug/L		102	53 - 142
Chloroform	<5.0		50.0	50.7		ug/L		101	76 - 120
1,1,1-Trichloroethane	13		50.0	63.7		ug/L		102	72 - 130
Carbon tetrachloride	<5.0		50.0	52.4		ug/L		105	70 - 130
1,2-Dichloroethane	<5.0		50.0	50.7		ug/L		101	69 - 130
Trichloroethene	140		50.0	192		ug/L		109	75 - 120
1,2-Dichloropropane	<5.0		50.0	51.9		ug/L		104	75 - 120
Bromodichloromethane	<5.0		50.0	52.1		ug/L		104	77 - 121
cis-1,3-Dichloropropene	<5.0		50.0	48.4		ug/L		97	78 - 130
methyl isobutyl ketone	<20		50.0	47.5		ug/L		95	58 - 135
Toluene	<5.0		50.0	50.4		ug/L		101	75 - 120
trans-1,3-Dichloropropene	<5.0		50.0	49.6		ug/L		99	74 - 130
1,1,2-Trichloroethane	<5.0		50.0	54.3		ug/L		109	75 - 120
Tetrachloroethene	49		50.0	103		ug/L		108	75 - 120
2-Hexanone	<20		50.0	48.6		ug/L		97	55 - 140
Dibromochloromethane	<5.0		50.0	54.3		ug/L		109	71 - 126
Chlorobenzene	<5.0		50.0	53.8		ug/L		108	75 - 120
Ethylbenzene	<5.0		50.0	54.8		ug/L		110	75 - 120
Styrene	<5.0		50.0	52.5		ug/L		105	75 - 120
Bromoform	<5.0		50.0	55.6		ug/L		111	68 - 126
1,1,2,2-Tetrachloroethane	<5.0		50.0	56.5		ug/L		113	72 - 130
Xylenes, Total	<5.0		100	105		ug/L		105	75 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		75 - 125
Toluene-d8 (Surr)	97		75 - 120
4-Bromofluorobenzene (Surr)	93		75 - 120
Dibromofluoromethane	95		75 - 120

Lab Sample ID: 500-79349-6 MSD

Matrix: Water

Analysis Batch: 242572

Client Sample ID: MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<5.0		50.0	48.3		ug/L		97	75 - 120	2	20
Chloromethane	<5.0		50.0	53.3		ug/L		107	63 - 133	1	20
Vinyl chloride	11		50.0	64.9		ug/L		108	72 - 123	0	20
Bromomethane	<5.0		50.0	63.5		ug/L		127	45 - 169	4	20
Chloroethane	<5.0		50.0	64.0		ug/L		128	58 - 147	1	20
1,1-Dichloroethene	11		50.0	54.6		ug/L		87	69 - 120	2	20

TestAmerica Chicago

QC Sample Results

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-79349-6 MSD

Matrix: Water

Analysis Batch: 242572

Client Sample ID: MW6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide	<5.0		50.0	39.0		ug/L		78	56 - 130	3	20
Acetone	<20		50.0	45.2		ug/L		90	48 - 149	1	20
Methylene Chloride	<10		50.0	47.7		ug/L		95	73 - 130	3	20
trans-1,2-Dichloroethene	<5.0		50.0	48.4		ug/L		95	77 - 120	2	20
1,1-Dichloroethane	12		50.0	61.2		ug/L		98	75 - 120	1	20
cis-1,2-Dichloroethene	38		50.0	87.5		ug/L		100	75 - 120	2	20
Methyl Ethyl Ketone	<20		50.0	48.2		ug/L		96	53 - 142	6	20
Chloroform	<5.0		50.0	50.0		ug/L		100	76 - 120	1	20
1,1,1-Trichloroethane	13		50.0	63.2		ug/L		101	72 - 130	1	20
Carbon tetrachloride	<5.0		50.0	52.0		ug/L		104	70 - 130	1	20
1,2-Dichloroethane	<5.0		50.0	49.6		ug/L		99	69 - 130	2	20
Trichloroethene	140		50.0	191		ug/L		107	75 - 120	0	20
1,2-Dichloropropane	<5.0		50.0	50.7		ug/L		101	75 - 120	2	20
Bromodichloromethane	<5.0		50.0	51.5		ug/L		103	77 - 121	1	20
cis-1,3-Dichloropropene	<5.0		50.0	48.0		ug/L		96	78 - 130	1	20
methyl isobutyl ketone	<20		50.0	47.3		ug/L		95	58 - 135	1	20
Toluene	<5.0		50.0	49.4		ug/L		99	75 - 120	2	20
trans-1,3-Dichloropropene	<5.0		50.0	49.3		ug/L		99	74 - 130	1	20
1,1,2-Trichloroethane	<5.0		50.0	54.4		ug/L		109	75 - 120	0	20
Tetrachloroethene	49		50.0	102		ug/L		107	75 - 120	0	20
2-Hexanone	<20		50.0	49.4		ug/L		99	55 - 140	2	20
Dibromochloromethane	<5.0		50.0	55.1		ug/L		110	71 - 126	1	20
Chlorobenzene	<5.0		50.0	53.2		ug/L		106	75 - 120	1	20
Ethylbenzene	<5.0		50.0	54.3		ug/L		109	75 - 120	1	20
Styrene	<5.0		50.0	52.0		ug/L		104	75 - 120	1	20
Bromoform	<5.0		50.0	55.5		ug/L		111	68 - 126	0	20
1,1,2,2-Tetrachloroethane	<5.0		50.0	58.1		ug/L		116	72 - 130	3	20
Xylenes, Total	<5.0		100	104		ug/L		104	75 - 120	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		75 - 125
Toluene-d8 (Surr)	97		75 - 120
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane	94		75 - 120

TestAmerica Chicago

Lab Chronicle

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW1

Date Collected: 06/23/14 15:00

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 15:27	BDA	TAL CHI

Client Sample ID: MW2

Date Collected: 06/23/14 14:30

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 15:52	BDA	TAL CHI

Client Sample ID: MW3

Date Collected: 06/23/14 14:00

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 16:17	BDA	TAL CHI

Client Sample ID: MW4

Date Collected: 06/23/14 13:30

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 16:42	BDA	TAL CHI

Client Sample ID: MW5

Date Collected: 06/23/14 12:59

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 17:07	BDA	TAL CHI

Client Sample ID: MW6

Date Collected: 06/23/14 12:30

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 17:32	BDA	TAL CHI

Lab Chronicle

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Client Sample ID: MW7

Date Collected: 06/23/14 11:45

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 17:56	BDA	TAL CHI

Client Sample ID: MW8

Date Collected: 06/23/14 11:10

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 18:21	BDA	TAL CHI

Client Sample ID: MW9

Date Collected: 06/23/14 11:23

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 18:46	BDA	TAL CHI

Client Sample ID: FB

Date Collected: 06/23/14 00:00

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 19:11	BDA	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 06/23/14 00:00

Date Received: 06/24/14 10:10

Lab Sample ID: 500-79349-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	242572	06/26/14 19:36	BDA	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: Environmental Information Logistics (EIL)
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-79349-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-15

E-Mail:

PO#/Reference#

Temperature °C of Cooler: 3.3

TAL-4124-500 (1209)
6/27/2014

Login Sample Receipt Checklist

Client: Environmental Information Logistics (EIL)

Job Number: 500-79349-1

Login Number: 79349

List Source: TestAmerica Chicago

List Number: 1

Creator: Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Attachment 4

Data Summary Table

December 2013 Through June 2014

Data Summary

IPC/Roto-Rooter Site

Well	Location	Parameter ID	Parameter	Units	Interwell Upper Limit (95%)	Intrawell Upper Limit (99%)	Dec-13		Jan-14		Jun-14		Reporting Period Exceedance?
							Result	Qual	Result	Qual	Result	Qual	
MW1	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	25.1	5.2		NA		5	U	No
MW1	Downgradient	190504	1,1-Dichloroethane	ug/L	14	24.0	14		NA		14		No
MW1	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	21.1	13		NA		9.7		No
MW1	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	295	170		NA		160		No
MW1	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.6	5	U	NA		5	U	No
MW1	Downgradient	185820	Trichloroethene	ug/L	340	324	11		NA		16		No
MW1	Downgradient	185825	Vinyl Chloride	ug/L	48	10.4	14		NA		17		No
MW2	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	39.3	11		NA		10		No
MW2	Downgradient	190504	1,1-Dichloroethane	ug/L	14	5.4	5	U	NA		5	U	No
MW2	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	30.6	12		NA		11		No
MW2	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	131	50		NA		31		No
MW2	Downgradient	190525	Tetrachloroethene	ug/L	45.8	23.1	31		NA		31		No
MW2	Downgradient	185820	Trichloroethene	ug/L	340	293	170		NA		180		No
MW2	Downgradient	185825	Vinyl Chloride	ug/L	48	10.0	4.2		NA		2	U	No
MW3	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	45.5	11		NA		11		No
MW3	Upgradient	190504	1,1-Dichloroethane	ug/L	14	11.0	5	U	NA		5	U	No
MW3	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	36.3	11		NA		11		No
MW3	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	126	27		NA		26		No
MW3	Upgradient	190525	Tetrachloroethene	ug/L	45.8	39.7	35		NA		38		No
MW3	Upgradient	185820	Trichloroethene	ug/L	340	310	180		NA		200		No
MW3	Upgradient	185825	Vinyl Chloride	ug/L	48	2.0	2	U	NA		2	U	No
MW4	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	47.2	8.2		NA		6.3		No
MW4	Downgradient	190504	1,1-Dichloroethane	ug/L	14	69.9	6.9		NA		15		No
MW4	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	33.0	5	U	NA		5	U	No
MW4	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	461	58		NA		34		No
MW4	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	5	U	NA		5	U	No
MW4	Downgradient	185820	Trichloroethene	ug/L	340	5.0	5	U	NA		5	U	No
MW4	Downgradient	185825	Vinyl Chloride	ug/L	48	137	31		NA		20		No
MW5	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	78.5	11		NA		12		No
MW5	Upgradient	190504	1,1-Dichloroethane	ug/L	14	25.8	5.9		NA		5	U	No
MW5	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	34.0	10		NA		13		No
MW5	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	519	32		NA		27		No
MW5	Upgradient	190525	Tetrachloroethene	ug/L	45.8	75.7	35		NA		43		No
MW5	Upgradient	185820	Trichloroethene	ug/L	340	390	130		NA		140		No
MW5	Upgradient	185825	Vinyl Chloride	ug/L	48	15.0	2	U	NA		2	U	No

REVISED LIMITS

December 2013 Through June 2014
Data Summary
IPC/Roto-Rooter Site

Well	Location	Parameter ID	Parameter	Units	Interwell Upper Limit (95%)	Intrawell Upper Limit (99%)	Dec-13		Jan-14		Jun-14		Reporting Period Exceedance?
							Result	Qual	Result	Qual	Result	Qual	
MW6	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	71.3	12		NA		13		No
MW6	Upgradient	190504	1,1-Dichloroethane	ug/L	14	42.1	7.2		NA		12		No
MW6	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	36.5	10		NA		11		No
MW6	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	352	64		NA		38		No
MW6	Upgradient	190525	Tetrachloroethene	ug/L	45.8	47.6	28		NA		49		Yes
MW6	Upgradient	185820	Trichloroethene	ug/L	340	220	81		NA		140		No
MW6	Upgradient	185825	Vinyl Chloride	ug/L	48	104	11		NA		11		No
MW8	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	30.2	8.4		NA		5	U	No
MW8	Downgradient	190504	1,1-Dichloroethane	ug/L	14	34.0	18		10		8.9		Yes
MW8	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	14.1	7.2		NA		5	U	No
MW8	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	78.2	36		NA		14		No
MW8	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	11		NA		10		No
MW8	Downgradient	185820	Trichloroethene	ug/L	340	171	77		NA		47		No
MW8	Downgradient	185825	Vinyl Chloride	ug/L	48	2.0	2	U	NA		2	U	No
MW9	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	5.0	5	U	NA		5	U	No
MW9	Downgradient	190504	1,1-Dichloroethane	ug/L	14	5.0	5	U	NA		5	U	No
MW9	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	5.0	5	U	NA		5	U	No
MW9	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	5.0	7.3		NA		5	U	No
MW9	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	5	U	NA		5	U	No
MW9	Downgradient	185820	Trichloroethene	ug/L	340	5.0	5	U	NA		5	U	No
MW9	Downgradient	185825	Vinyl Chloride	ug/L	48	2.0	2	U	NA		2	U	No

All data reported in ug/L.

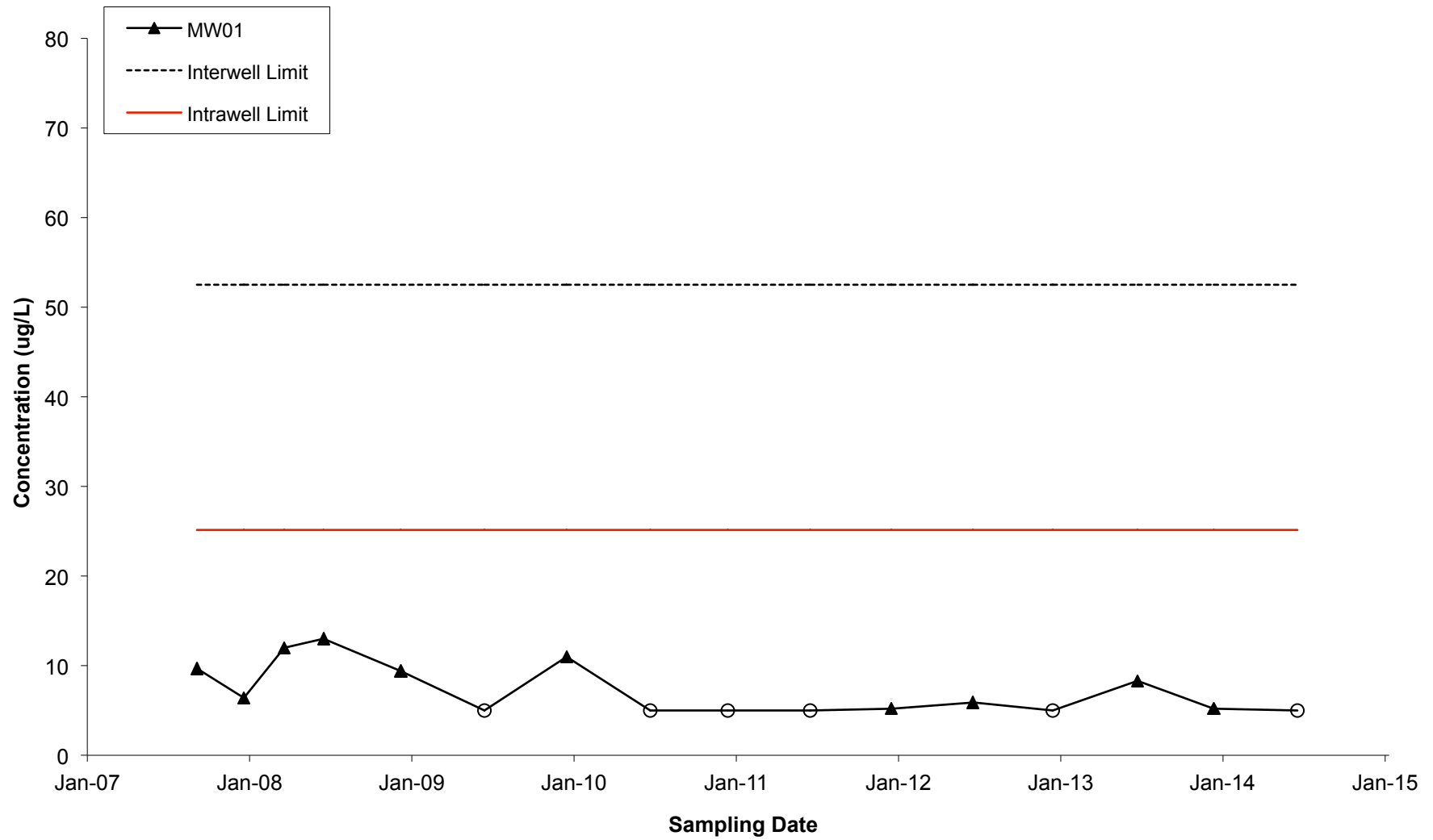
NA - Not Applicable / U - Not Detected

Attachment 5

COC Concentration Time Trends

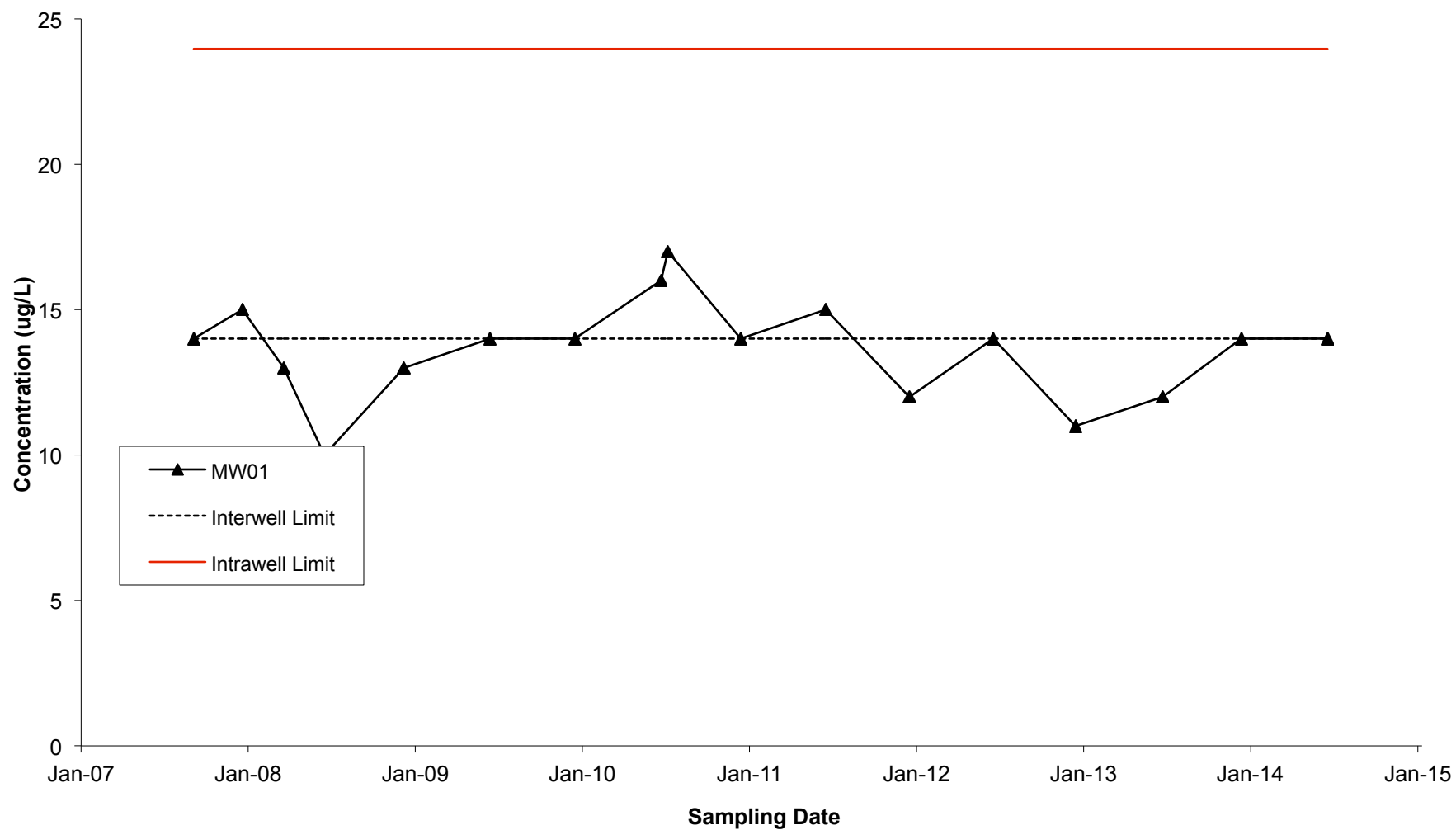
1,1,1-Trichloroethane in Well MW01 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



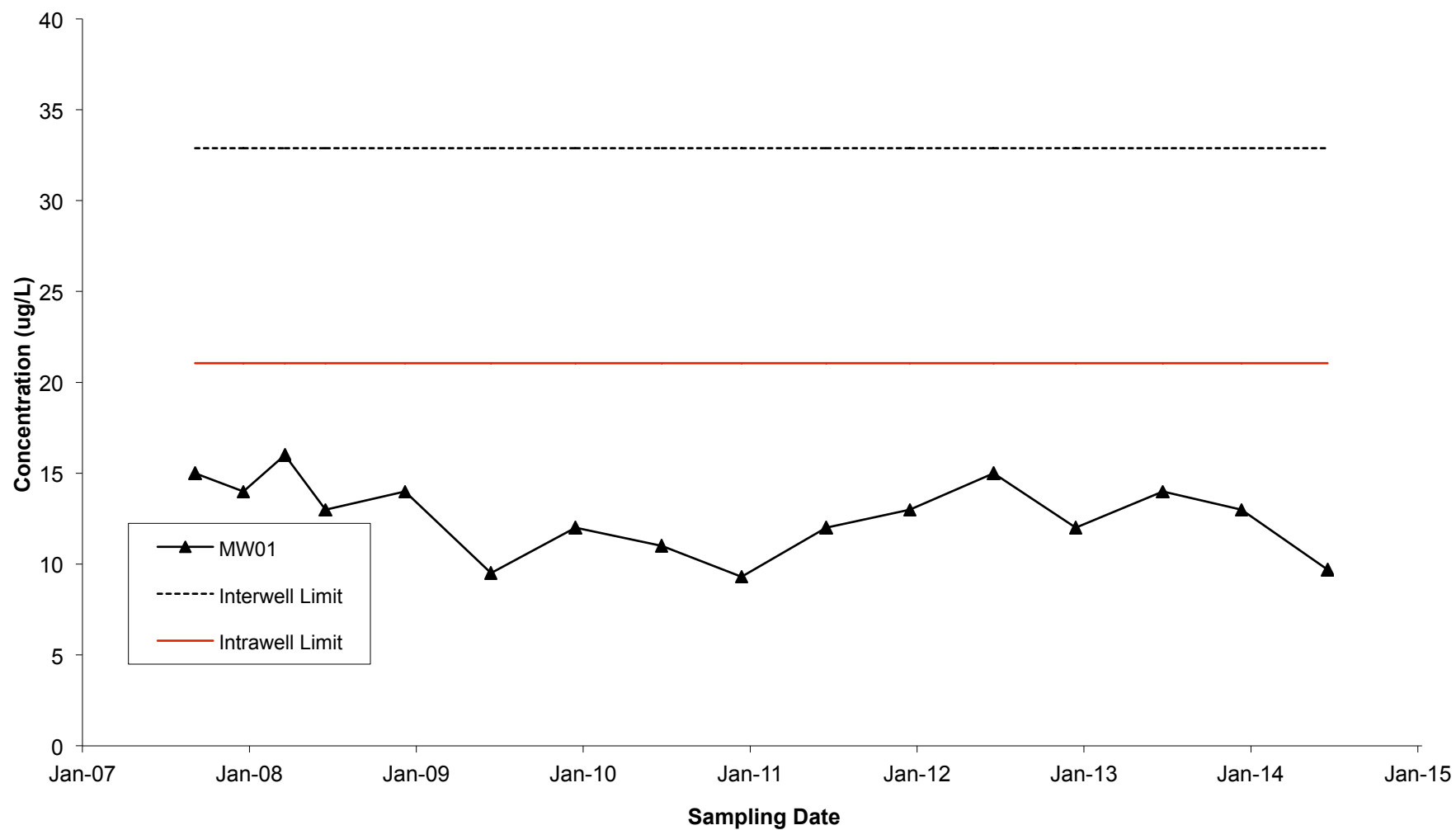
1,1-Dichloroethane in Well MW01 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



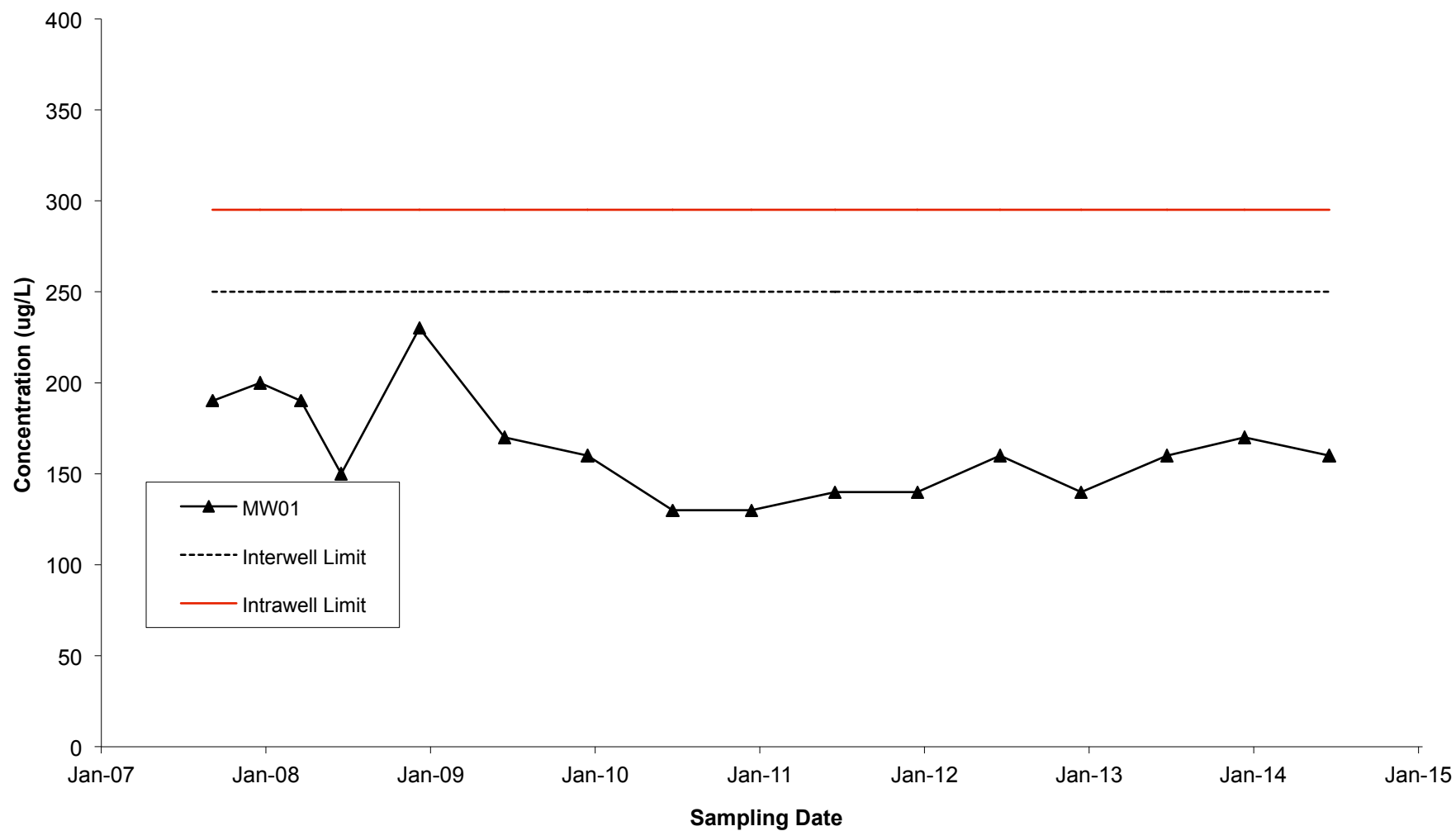
1,1-Dichloroethene in Well MW01 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



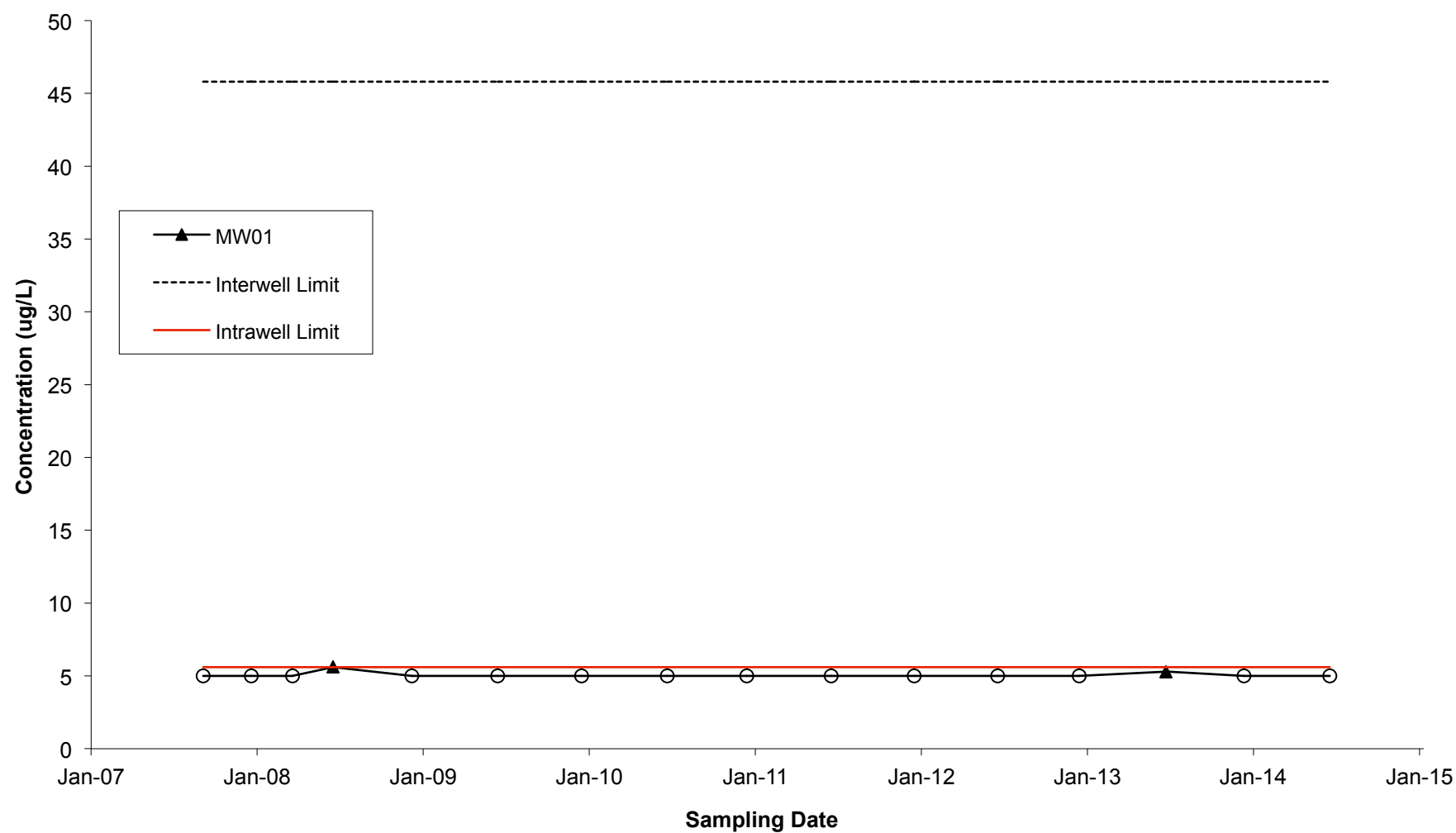
**cis-1,2-Dichloroethene in Well MW01
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



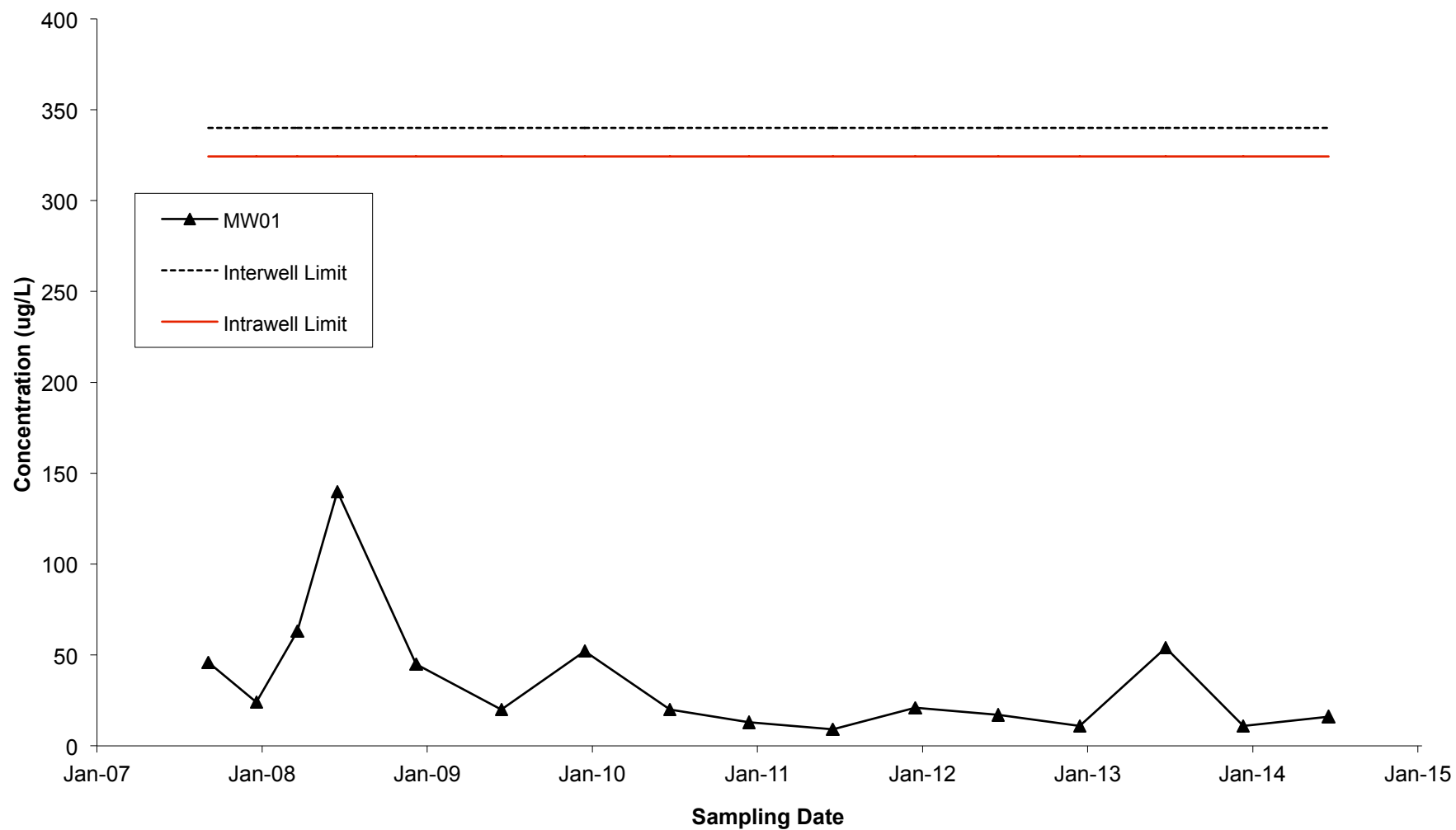
Tetrachloroethene in Well MW01 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



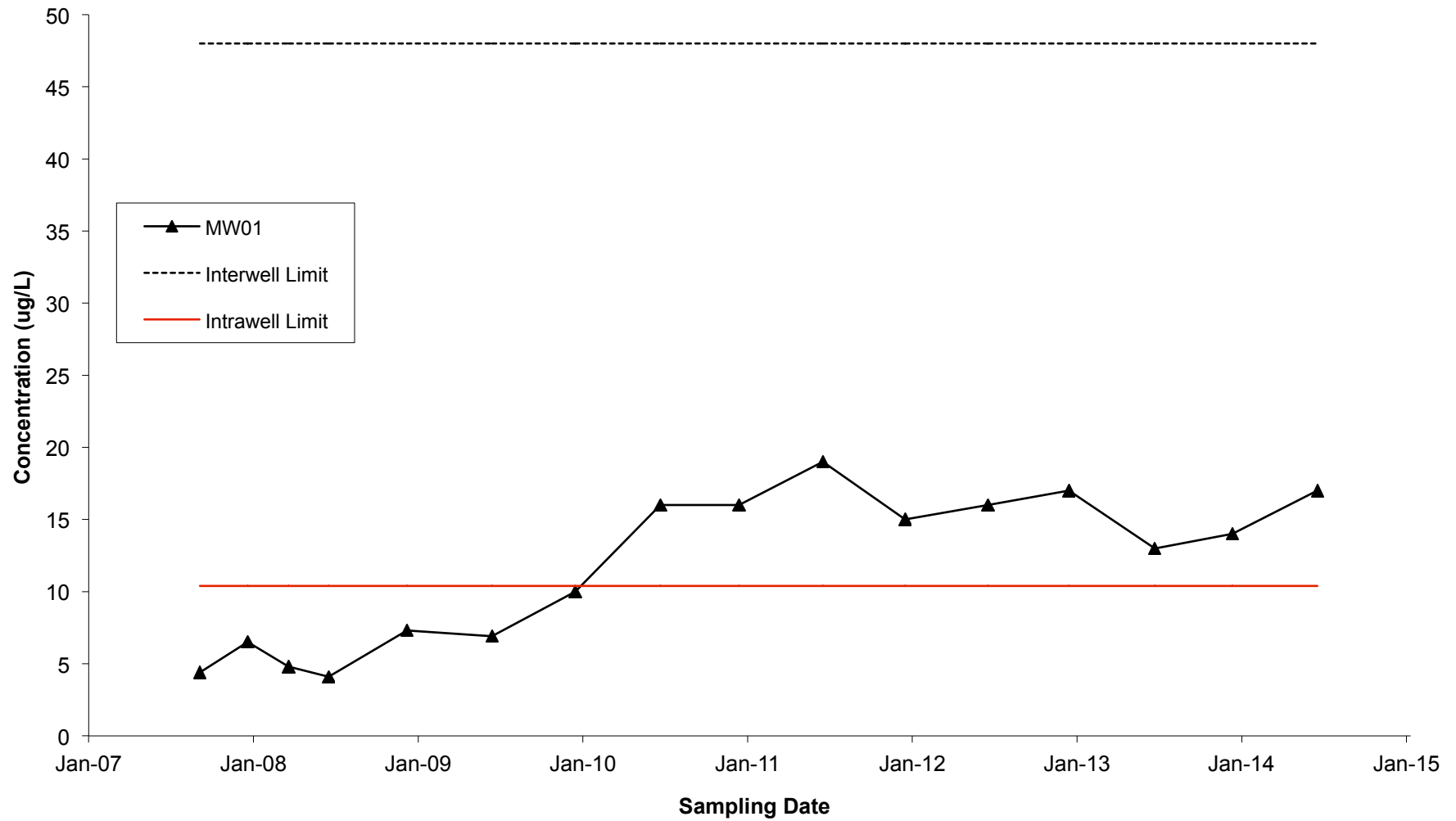
Trichloroethene in Well MW01 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



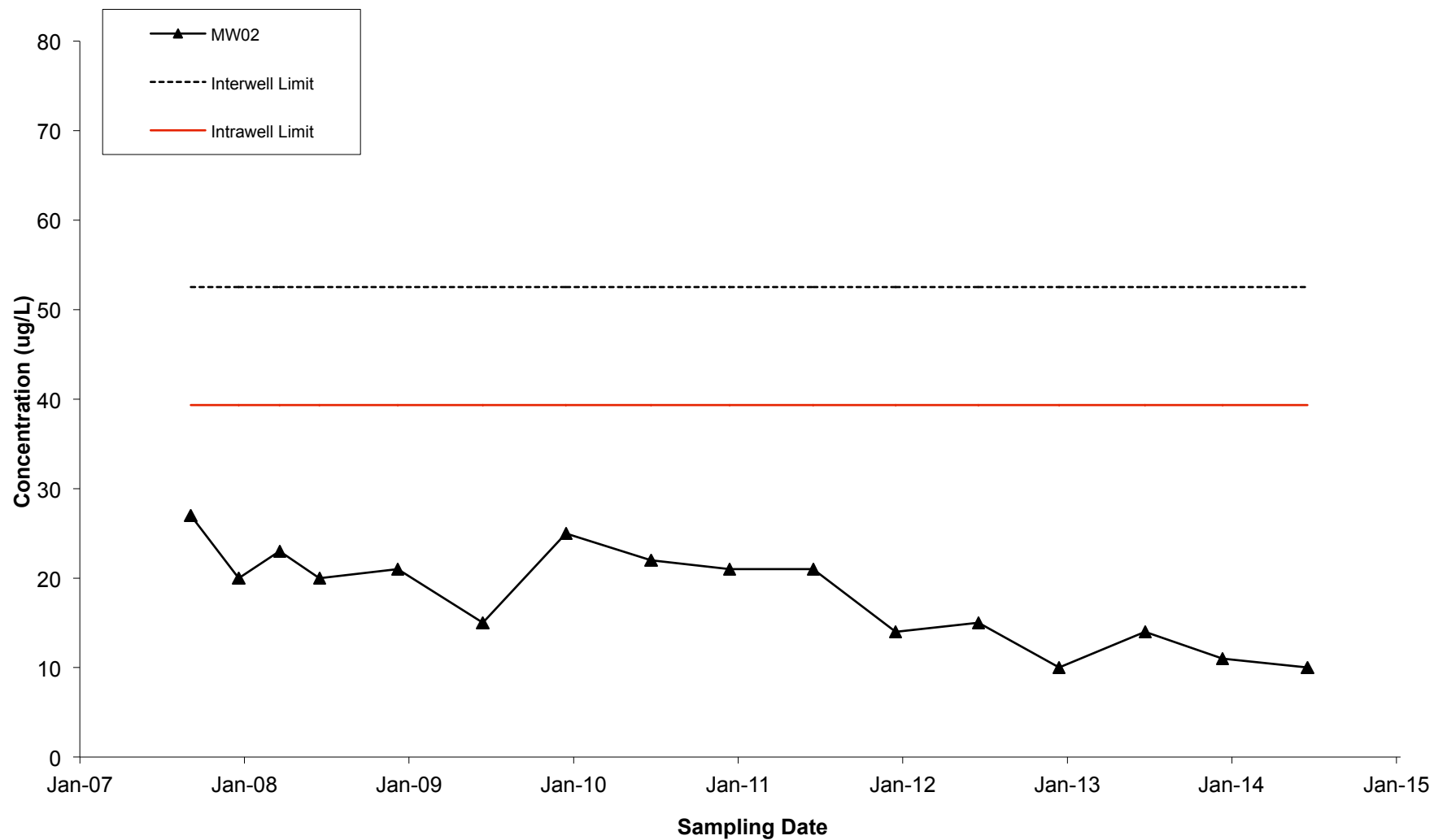
Vinyl Chloride in Well MW01 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



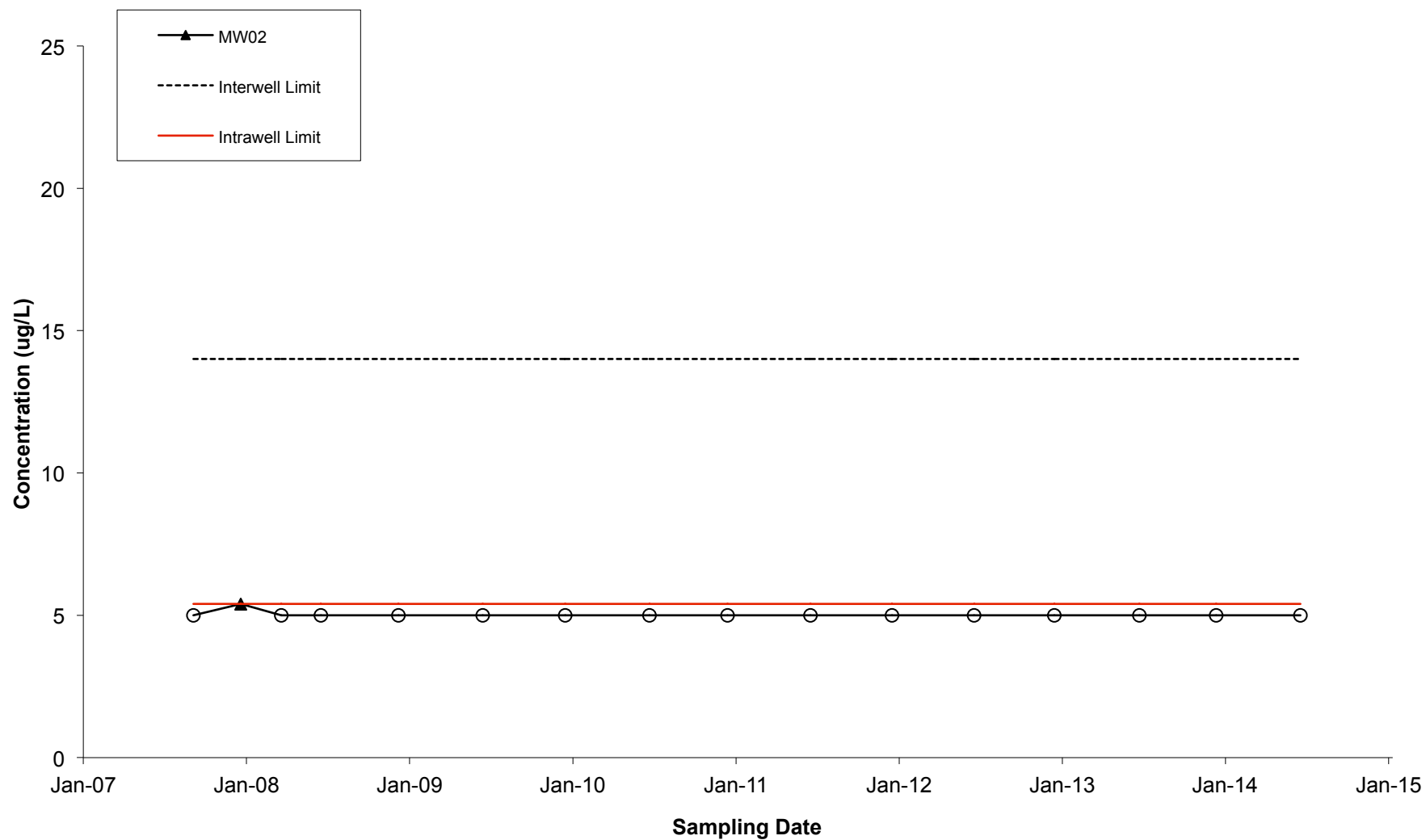
1,1,1-Trichloroethane in Well MW02 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



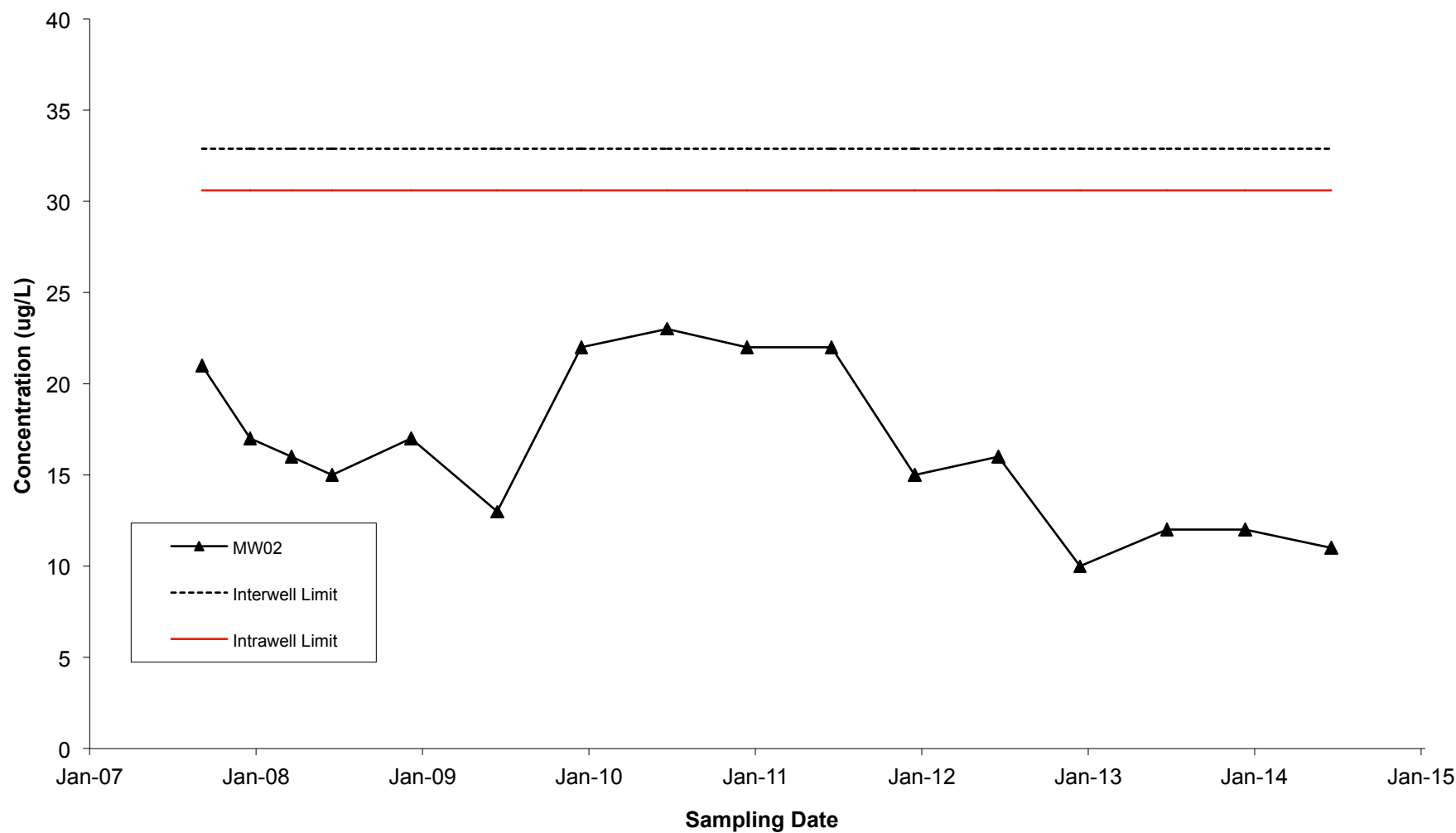
1,1-Dichloroethane in Well MW02 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



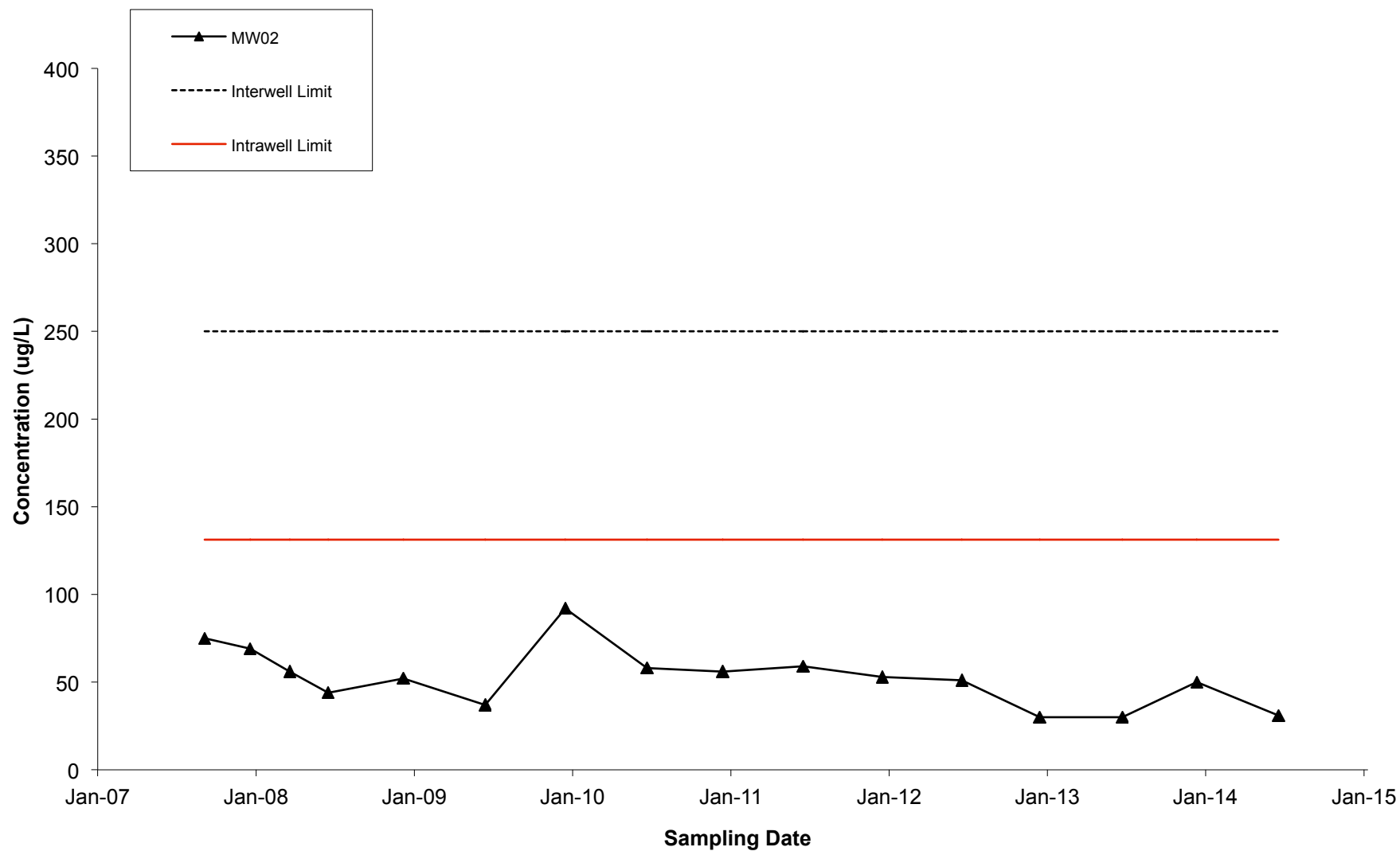
1,1-Dichloroethene in Well MW02 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



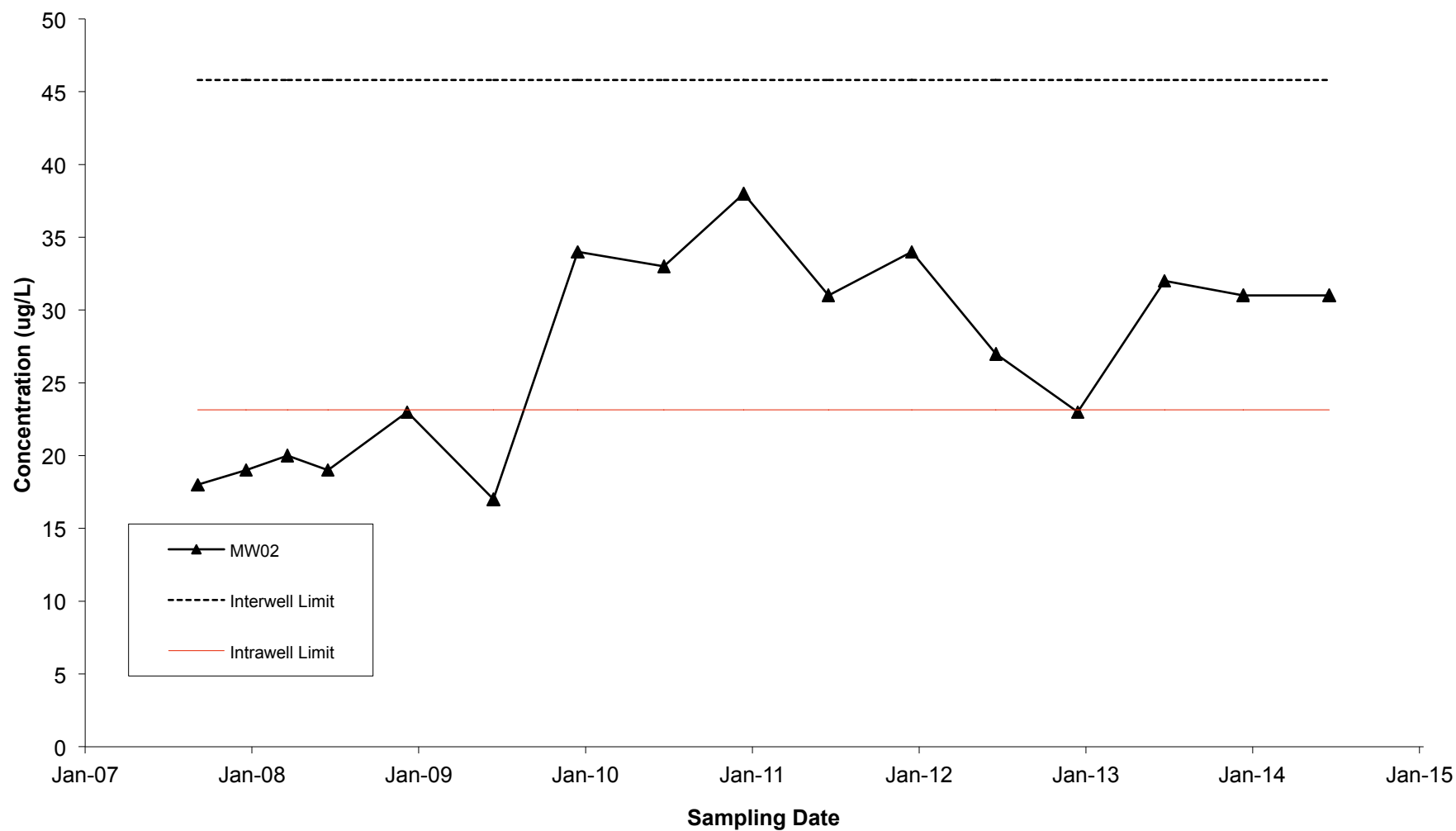
**cis-1,2-Dichloroethene in Well MW02
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



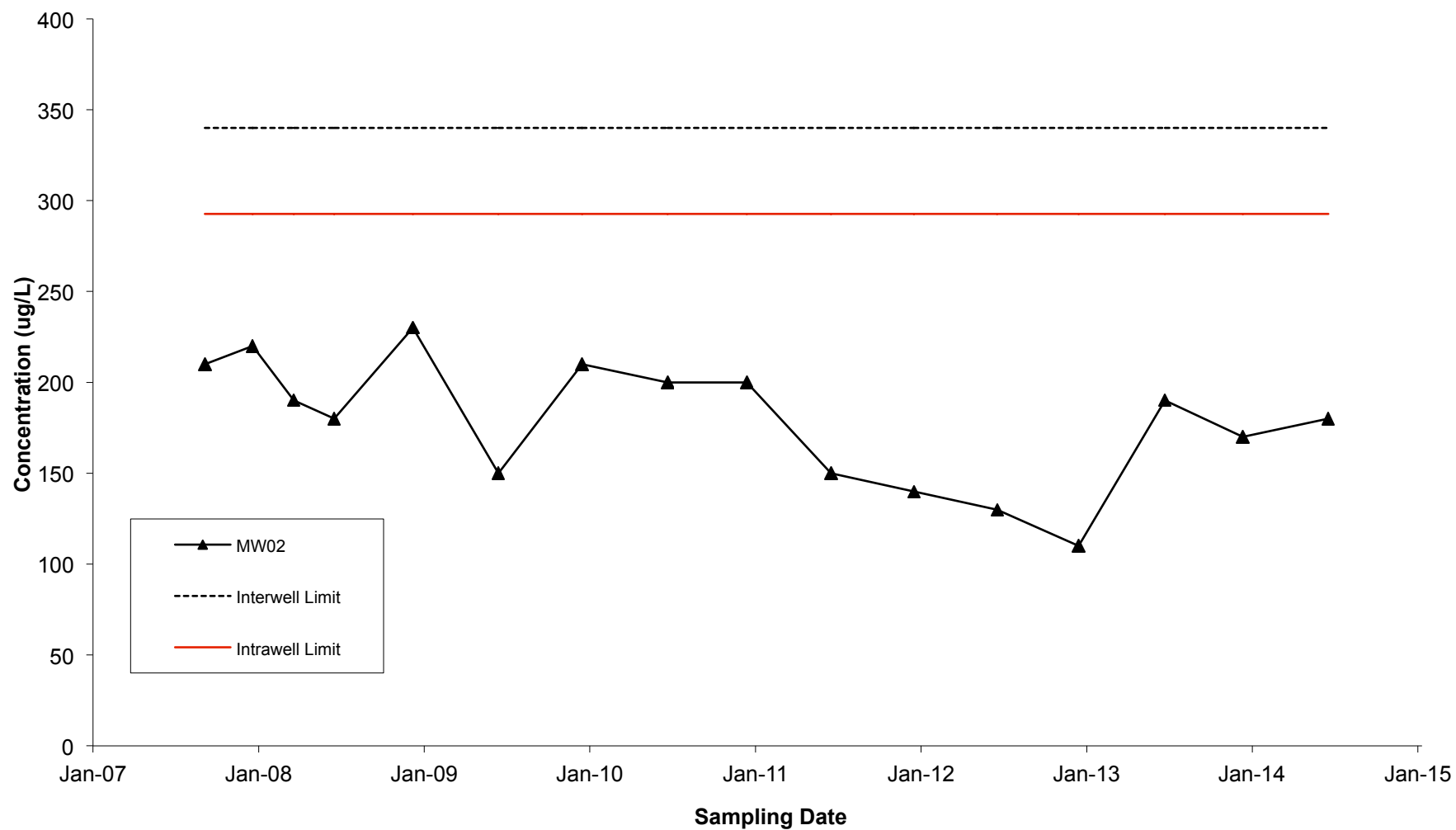
Tetrachloroethene in Well MW02 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



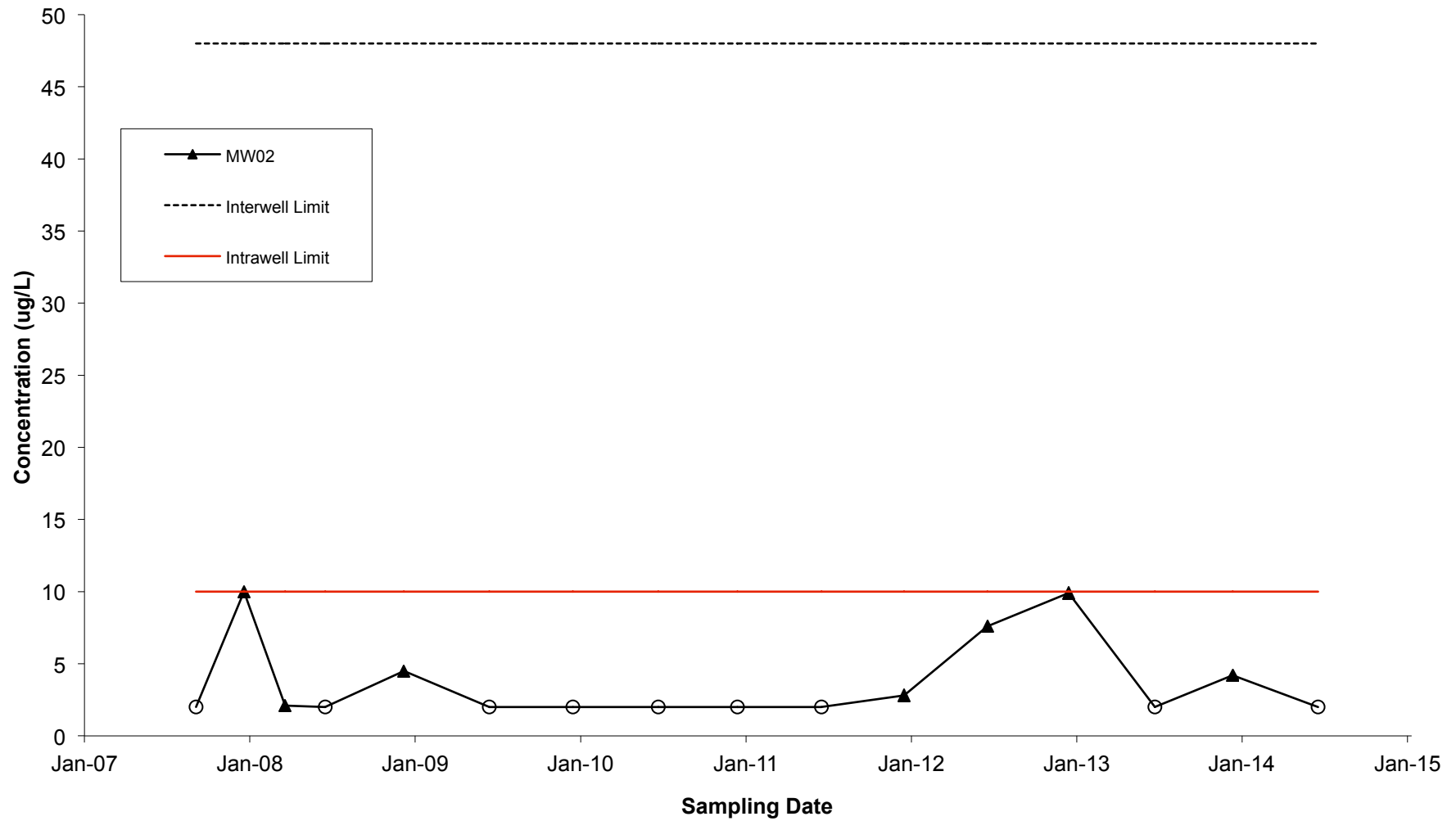
Trichloroethene in Well MW02 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



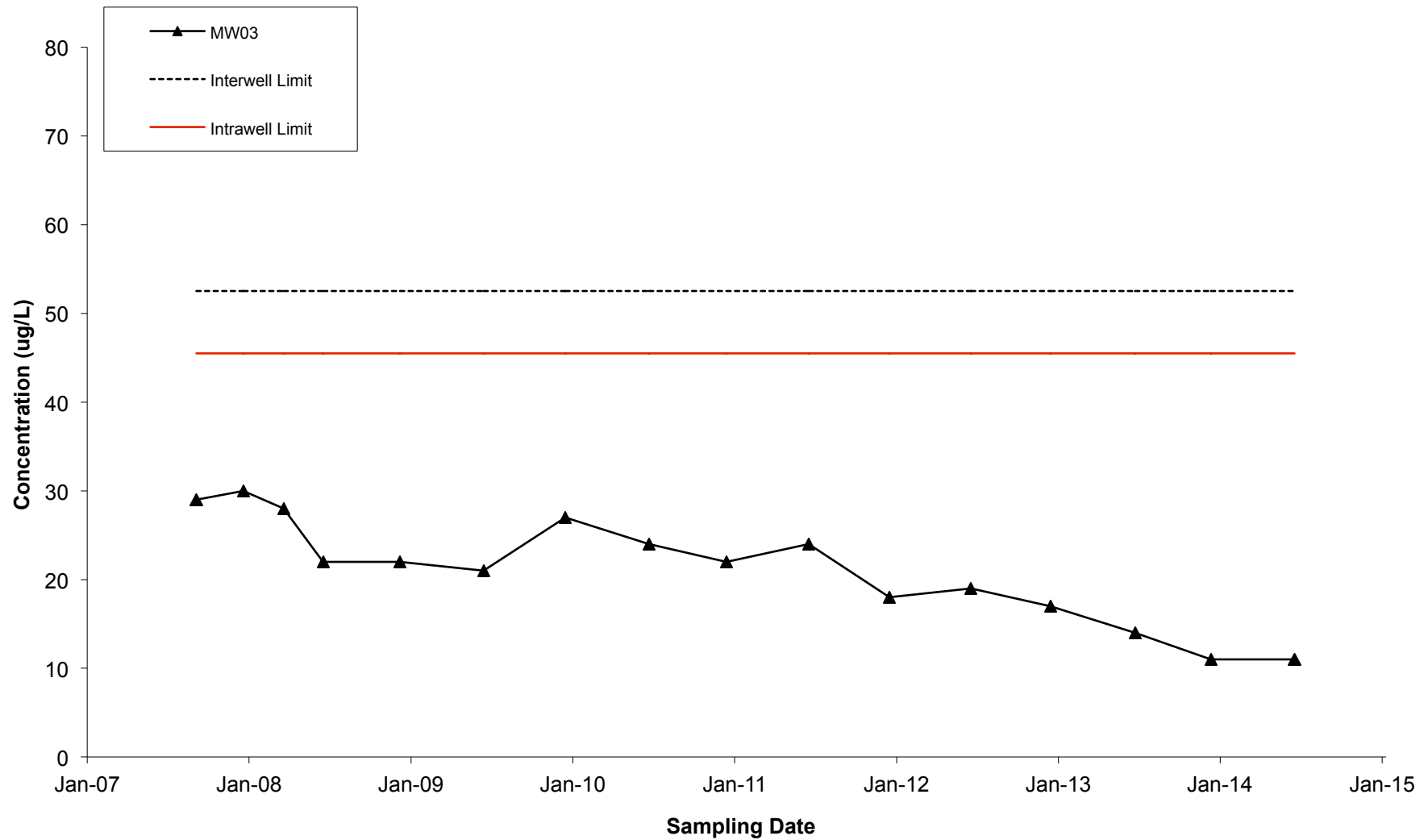
Vinyl Chloride in Well MW02 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



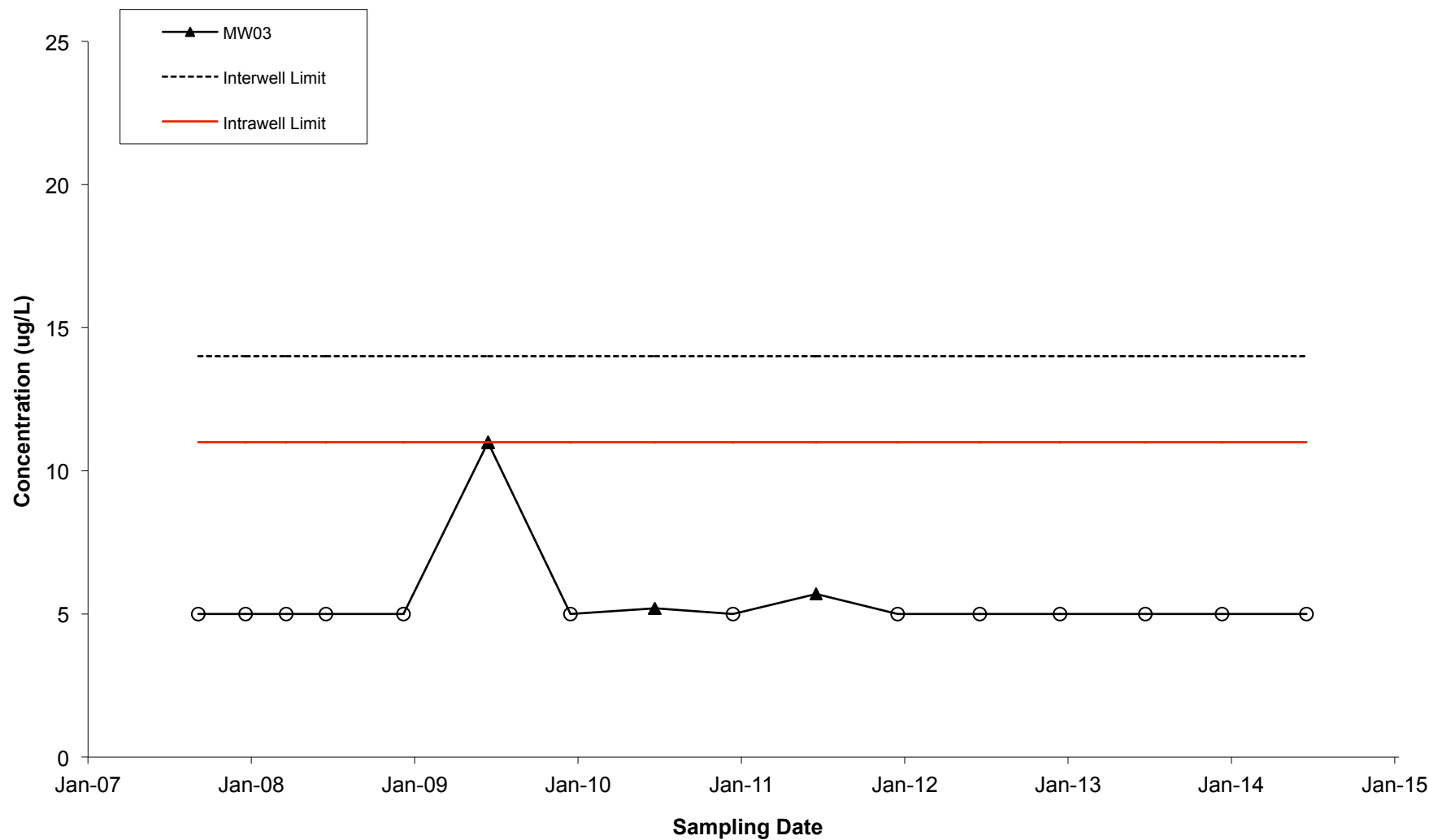
1,1,1-Trichloroethane in Well MW03 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



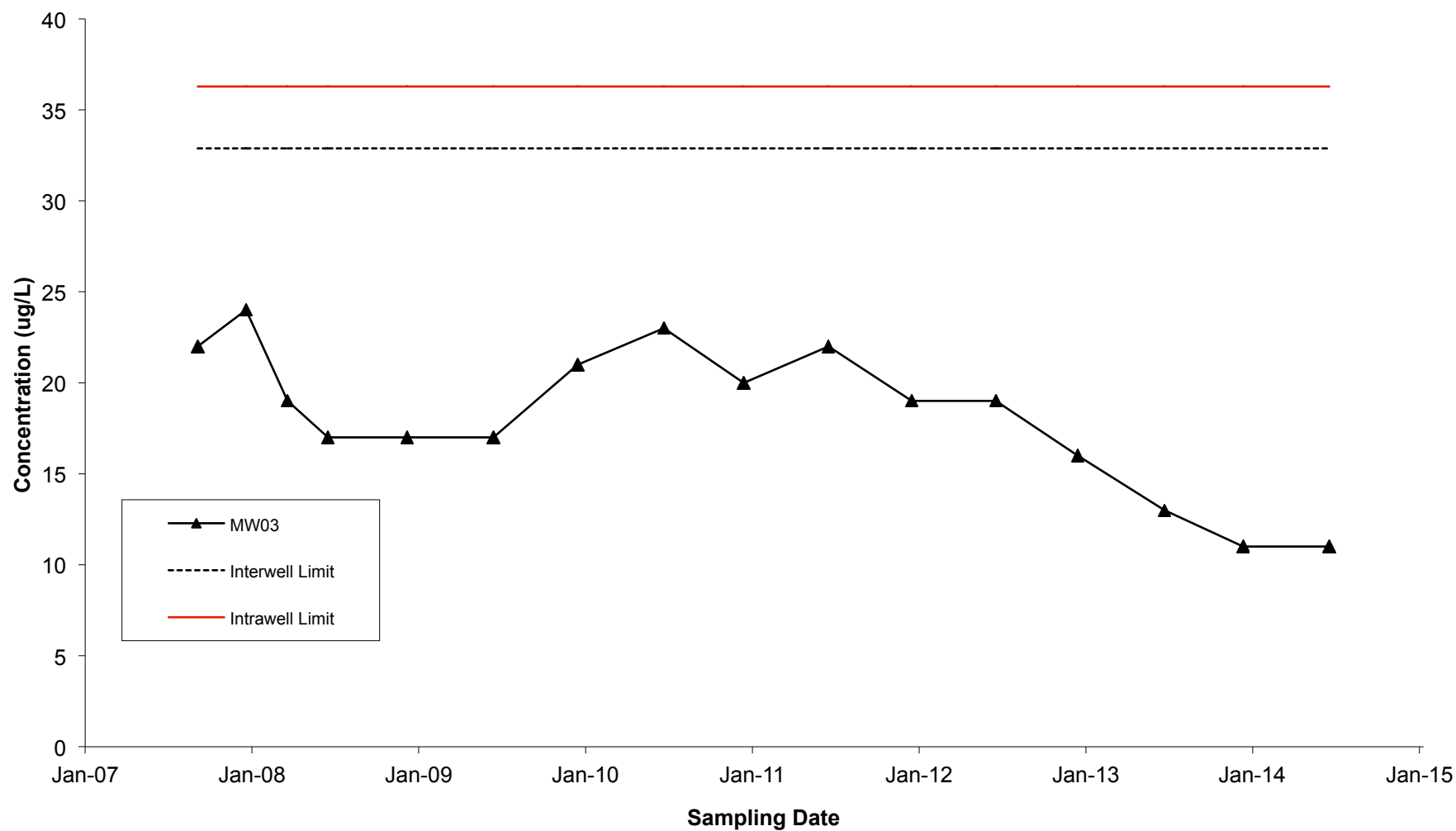
1,1-Dichloroethane in Well MW03 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



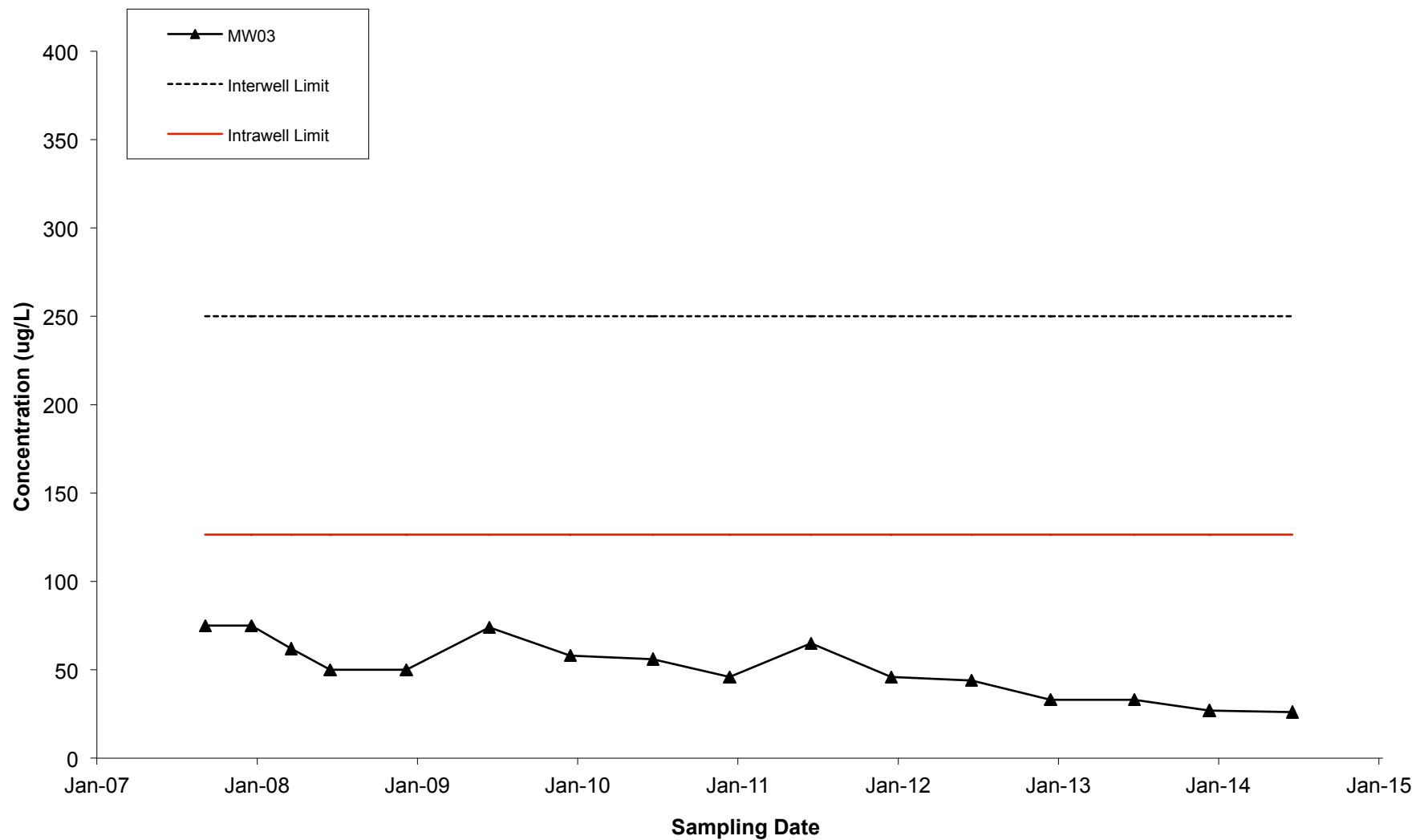
1,1-Dichloroethene in Well MW03 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



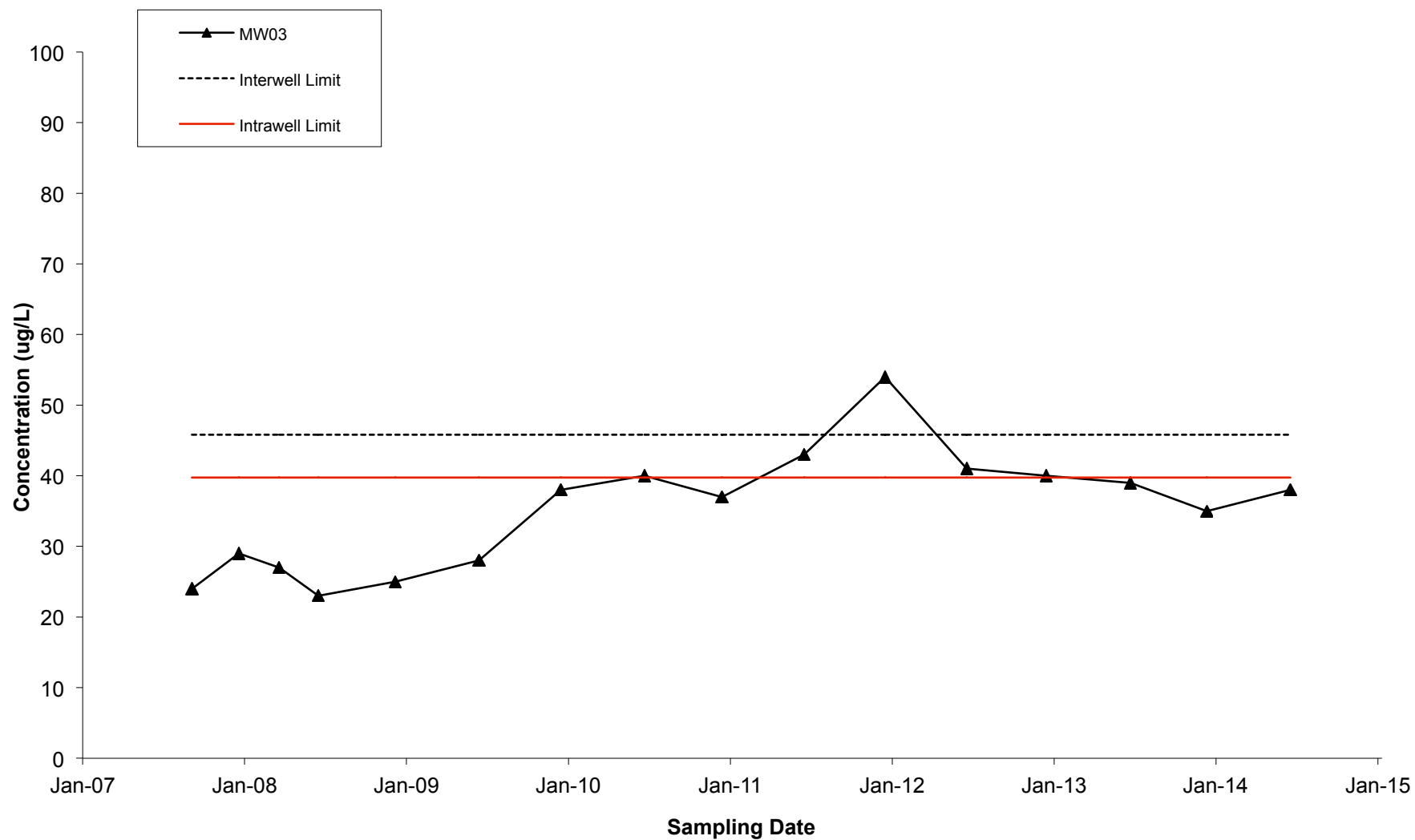
**cis-1,2-Dichloroethene in Well MW03
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



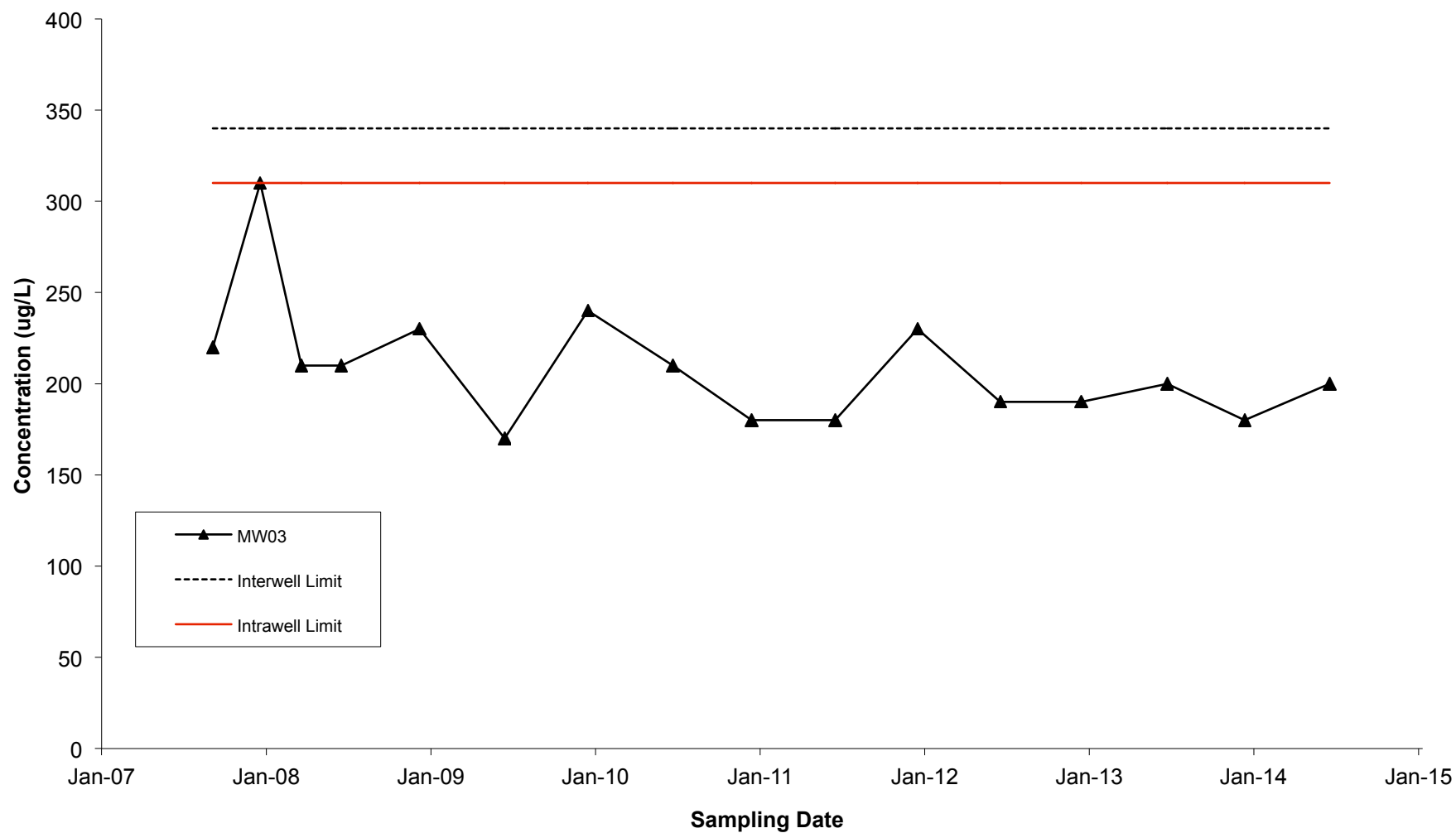
Tetrachloroethene in Well MW03 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



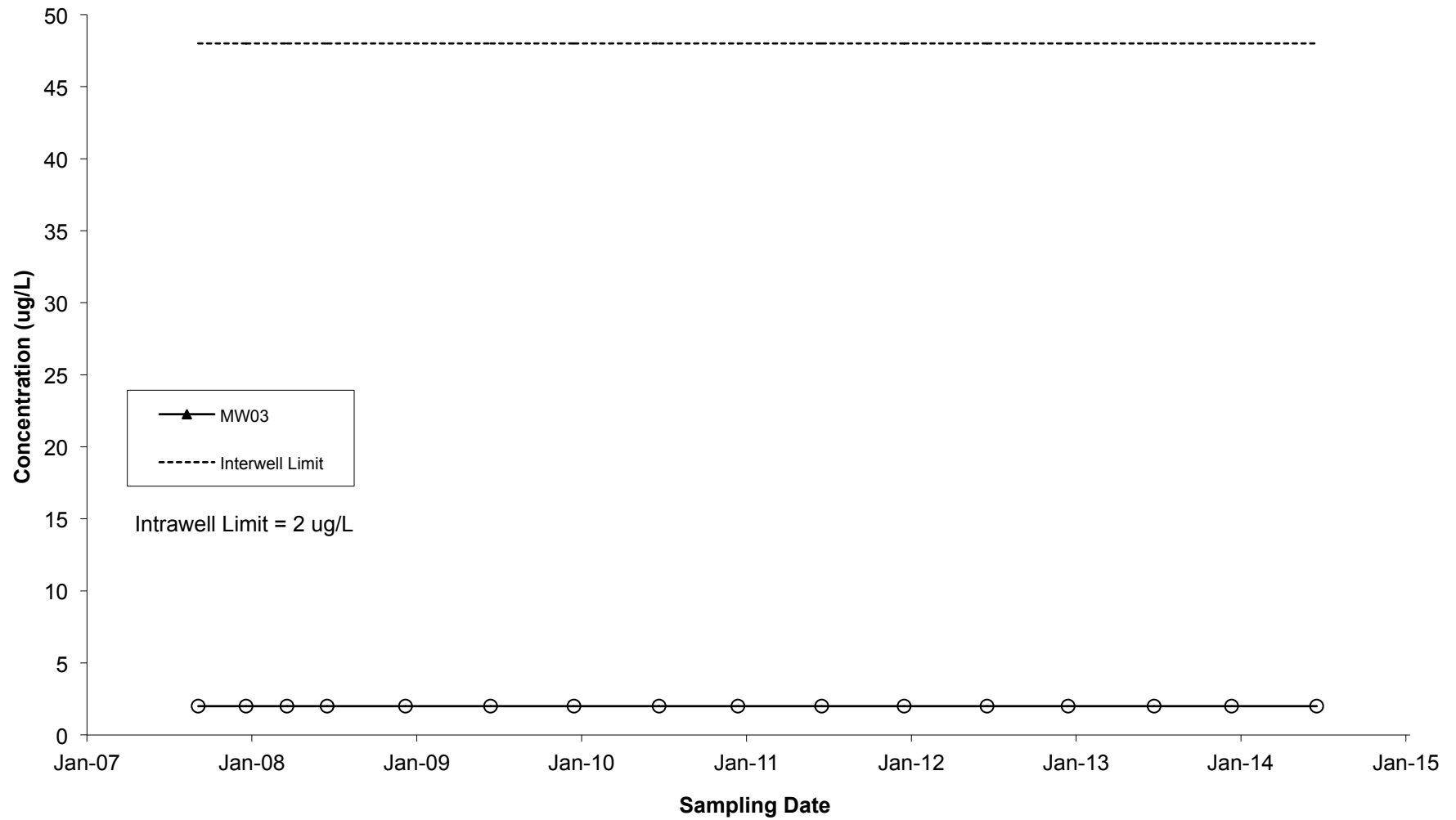
Trichloroethene in Well MW03 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



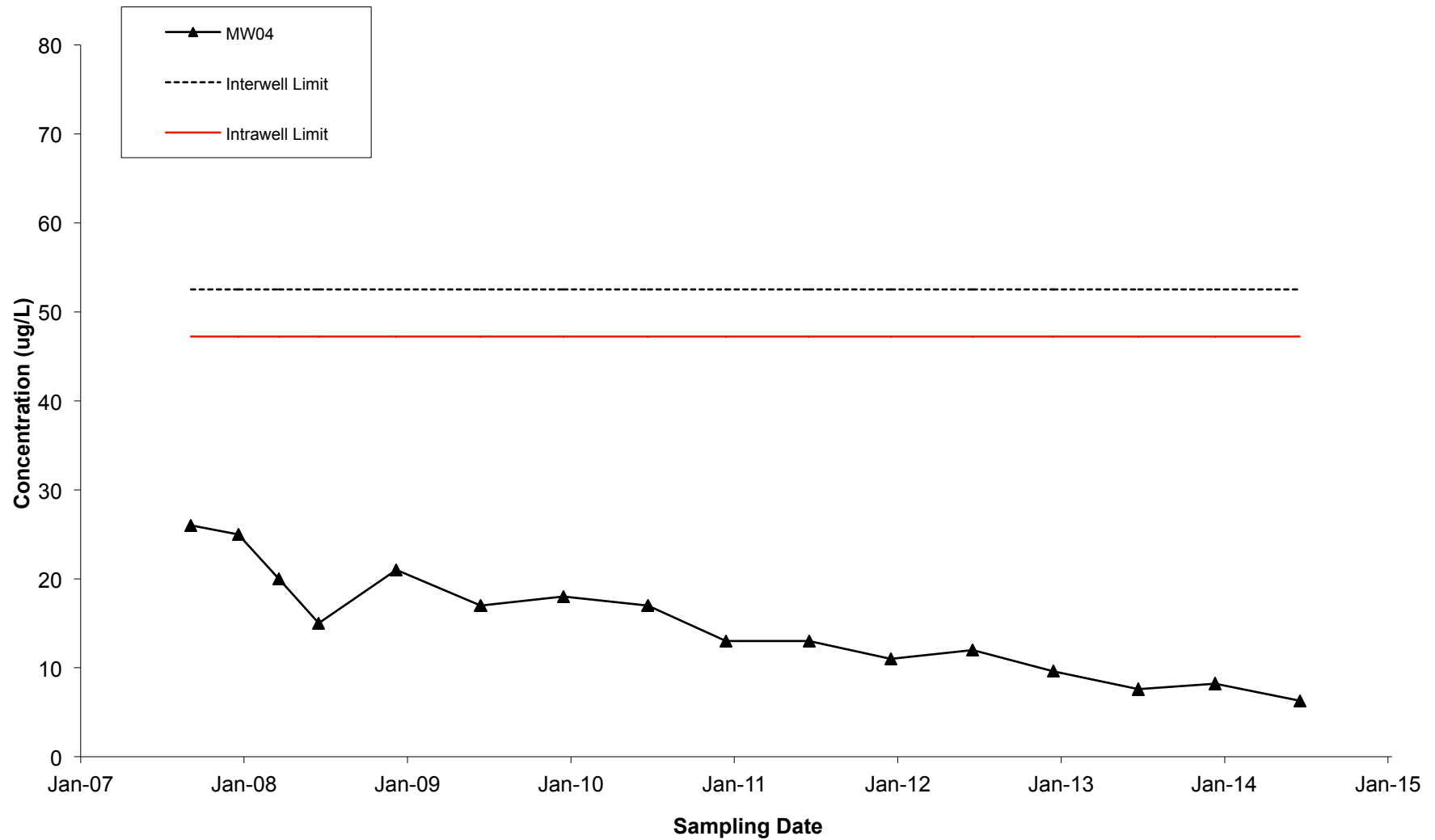
**Vinyl Chloride in Well MW03
IPC/Roto-Rooter Landfill**

Note: Non-detects are marked
with a clear circle.



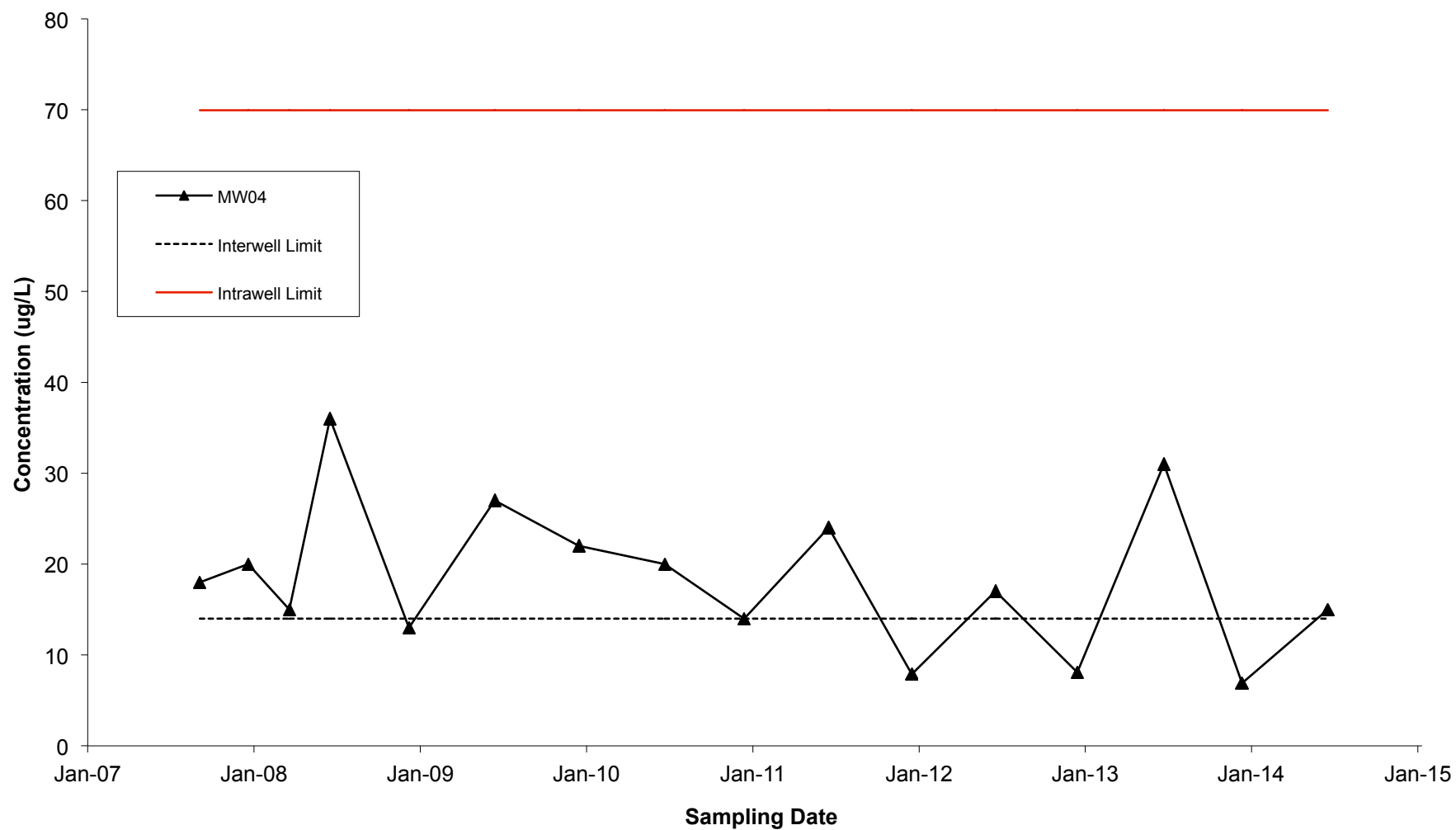
1,1,1-Trichloroethane in Well MW04 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



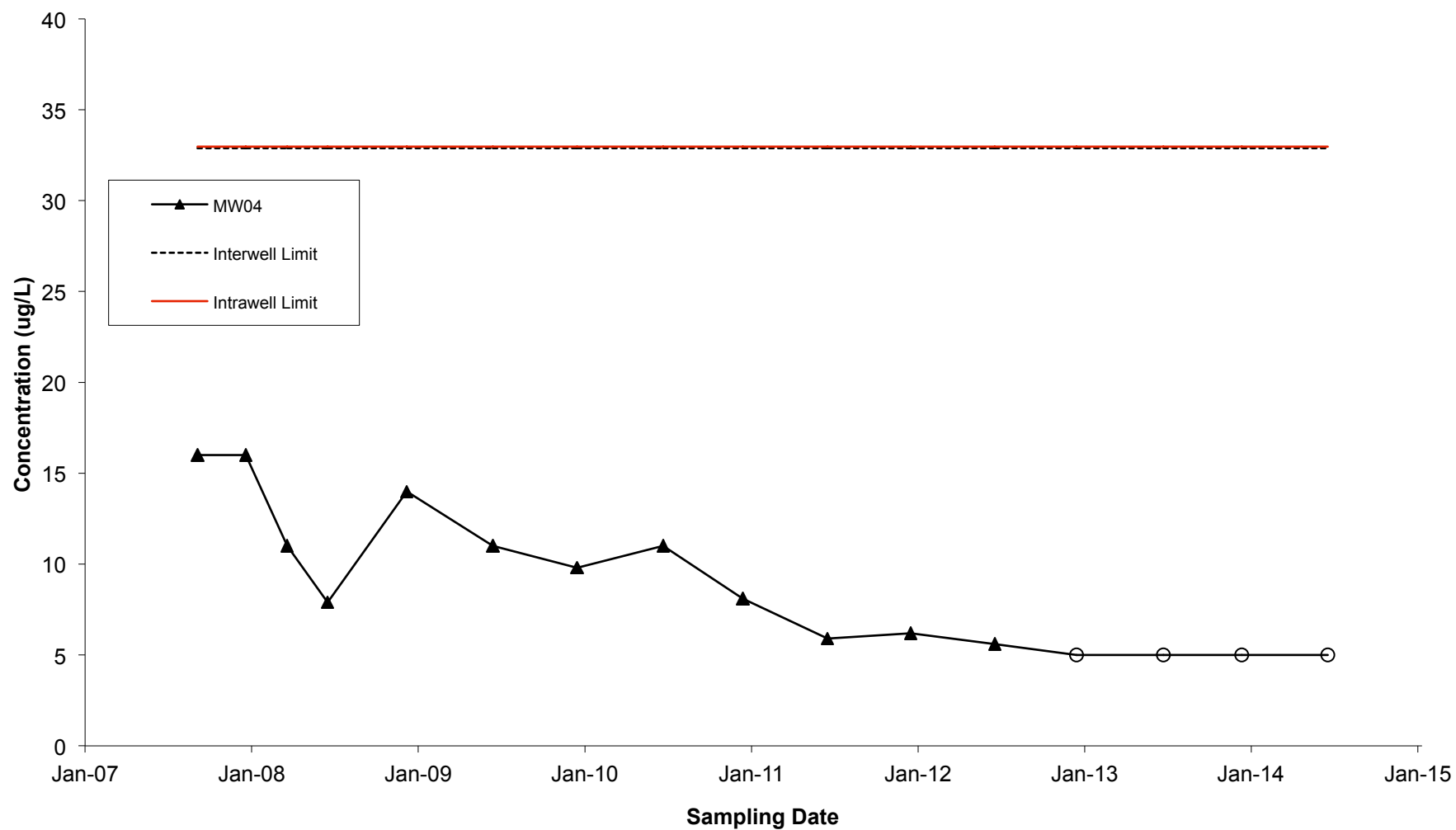
1,1-Dichloroethane in Well MW04 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



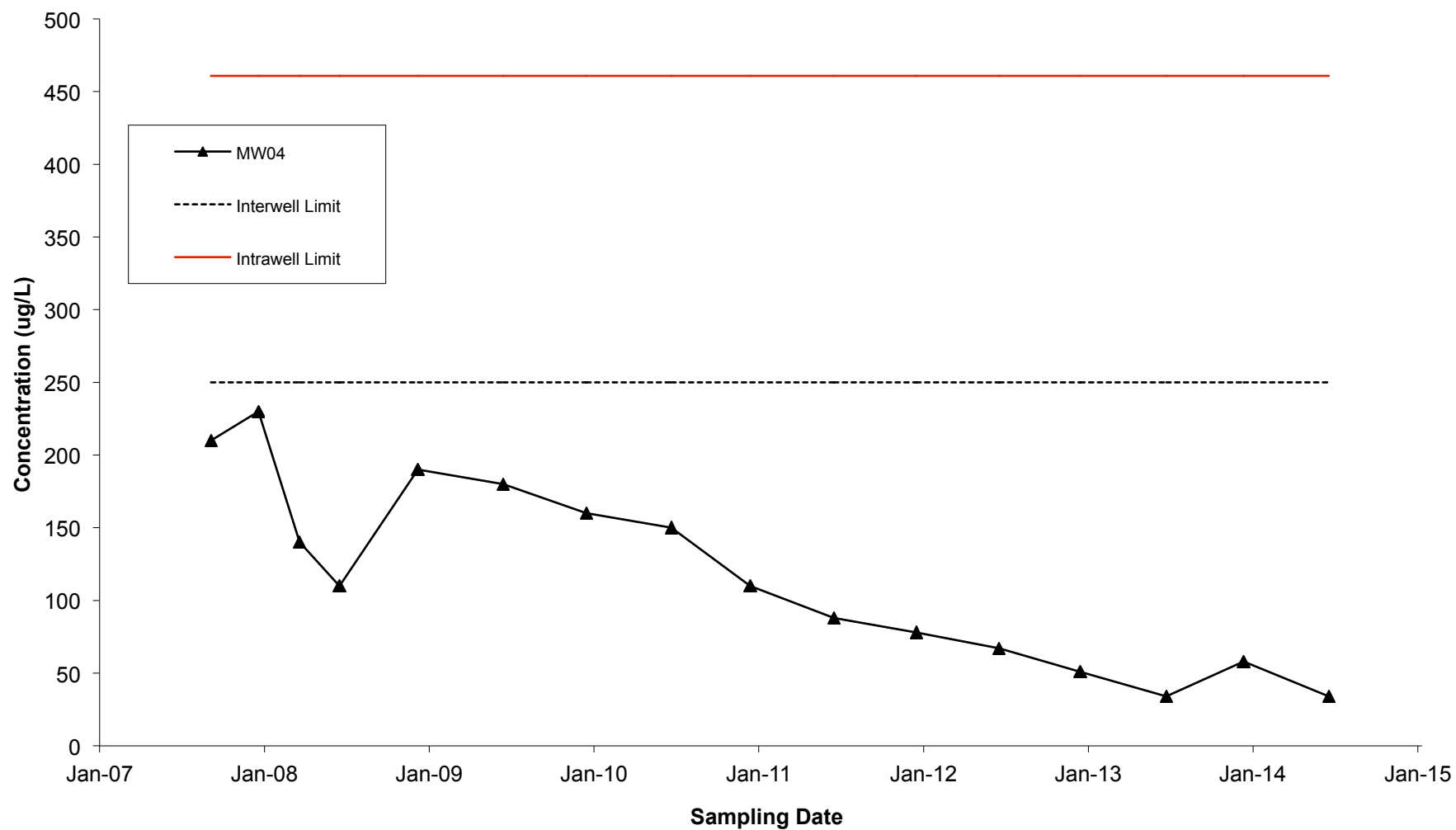
1,1-Dichloroethene in Well MW04 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



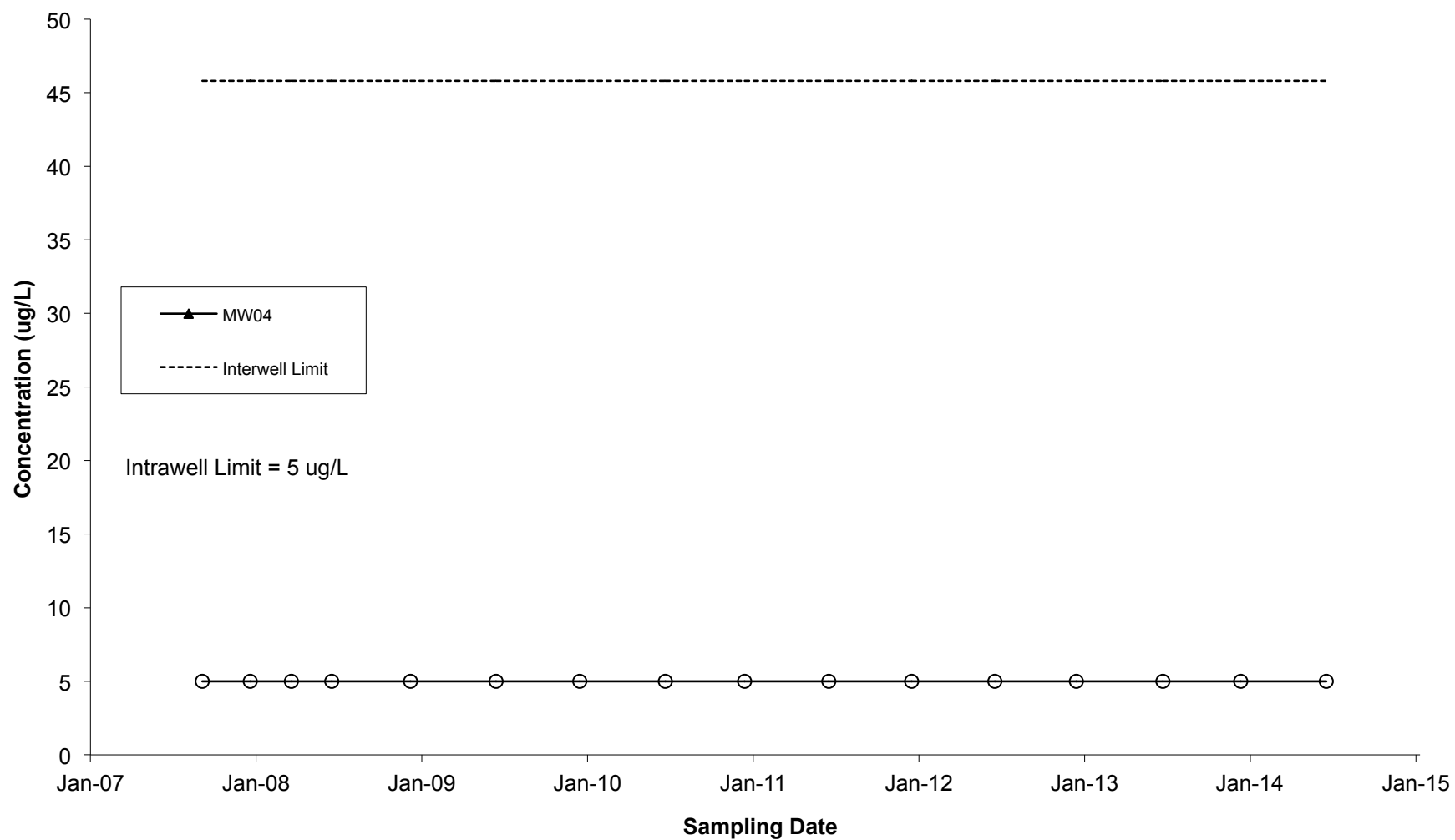
**cis-1,2-Dichloroethene in Well MW04
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



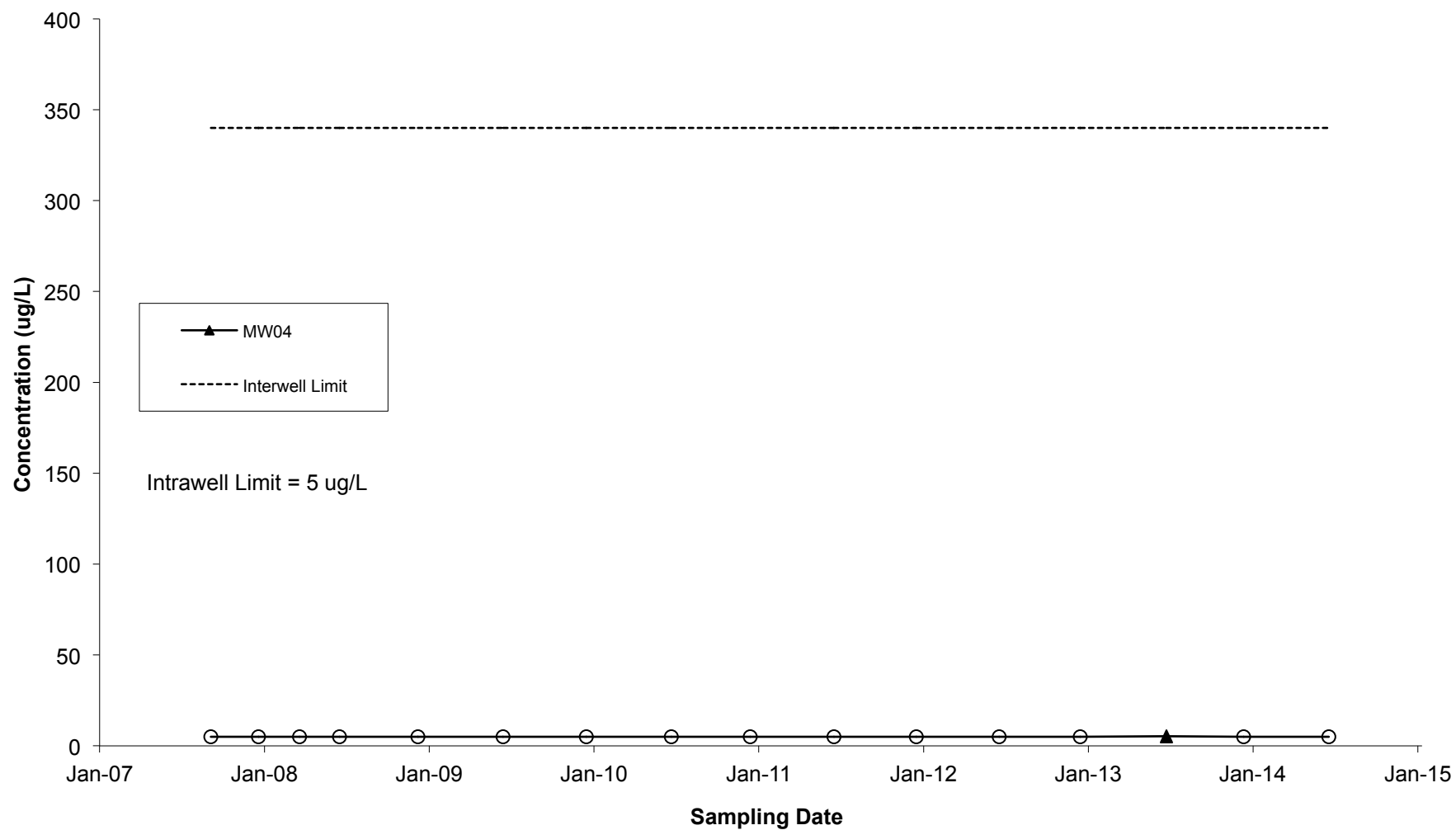
Tetrachloroethene in Well MW04 IPC/Roto-Rooter Landfill

Note: Non-detects are marked
with a clear circle.



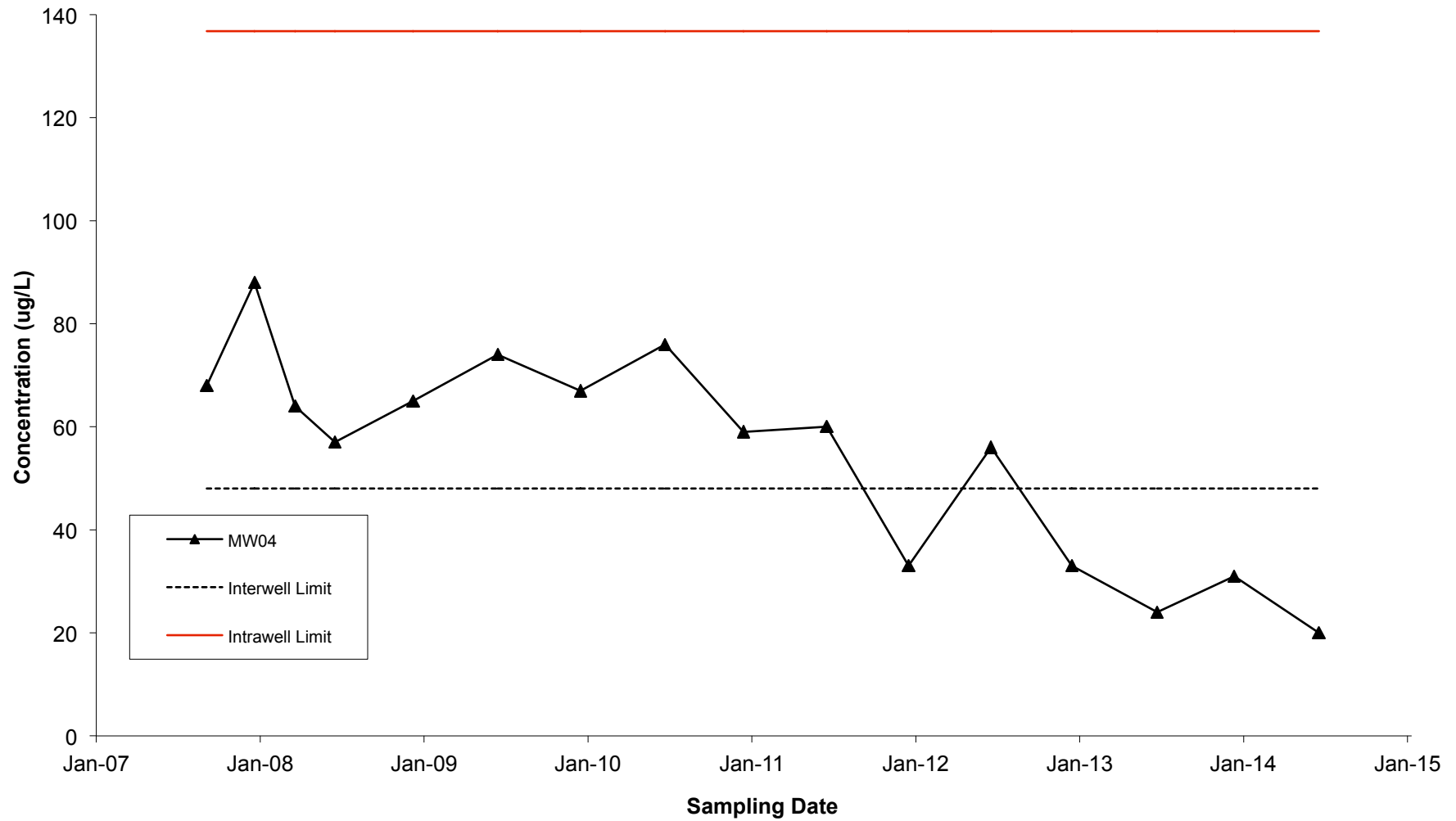
Trichloroethene in Well MW04 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



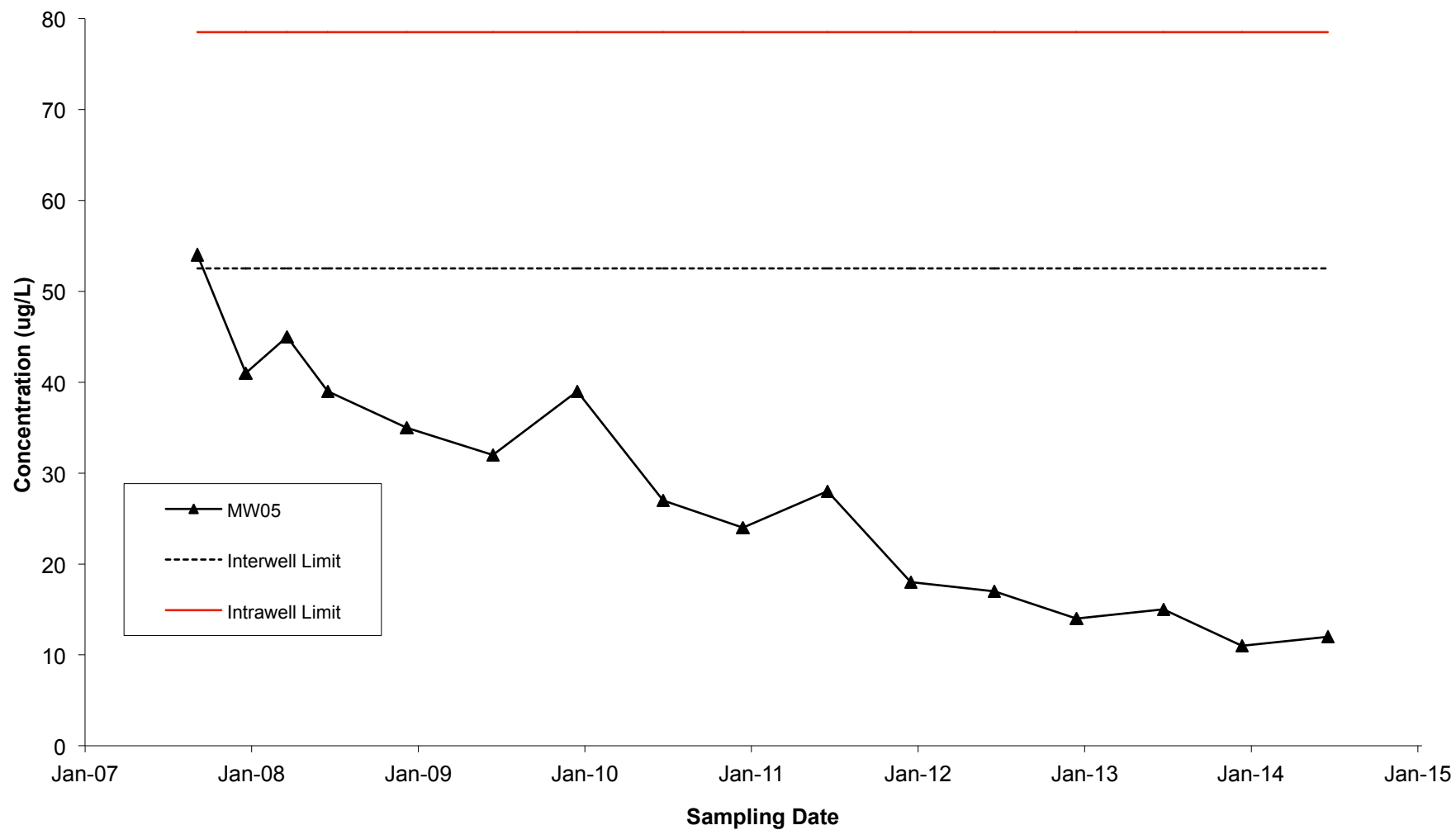
Vinyl Chloride in Well MW04 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



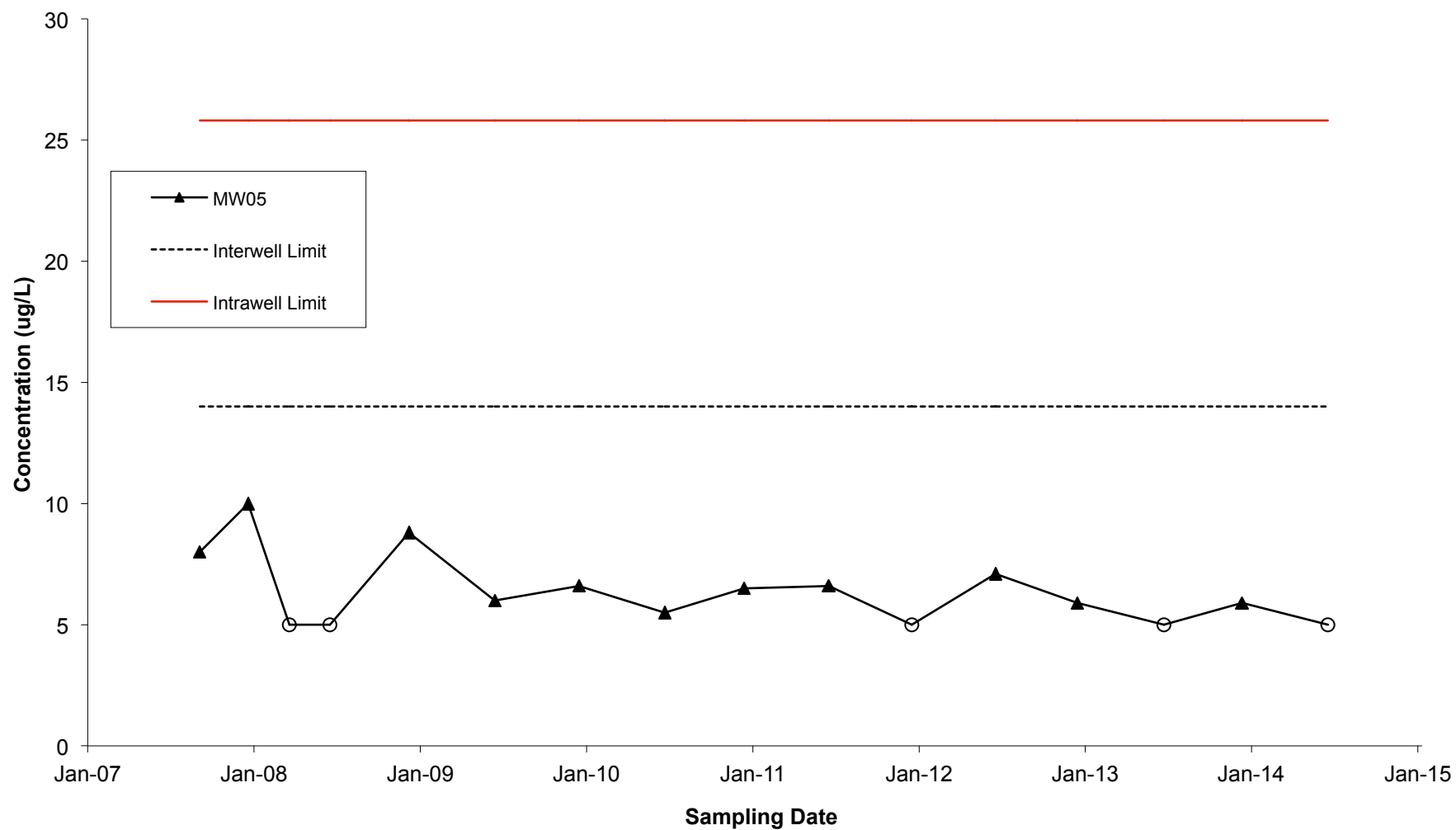
1,1,1-Trichloroethane in Well MW05 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



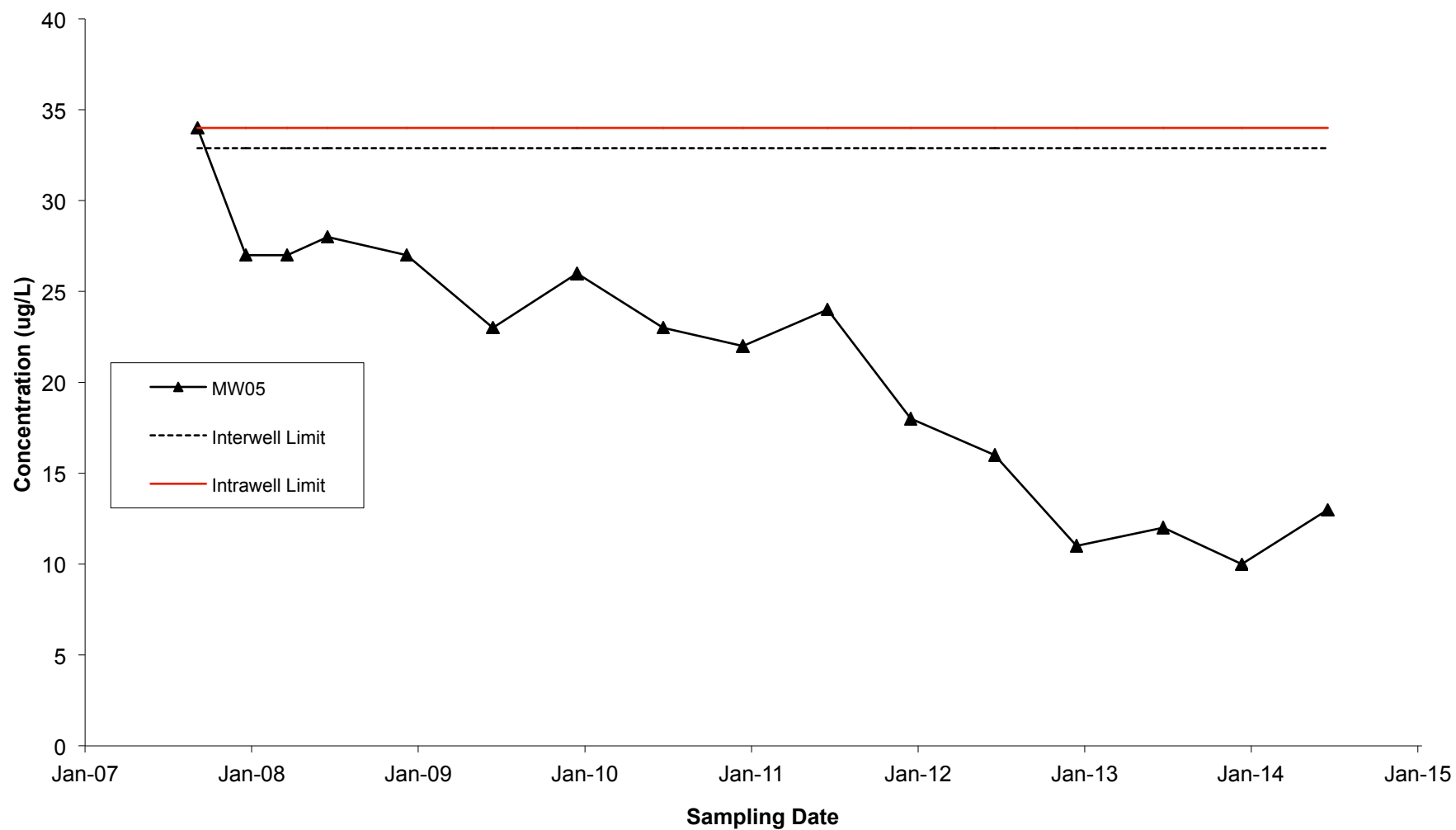
1,1-Dichloroethane in Well MW05 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



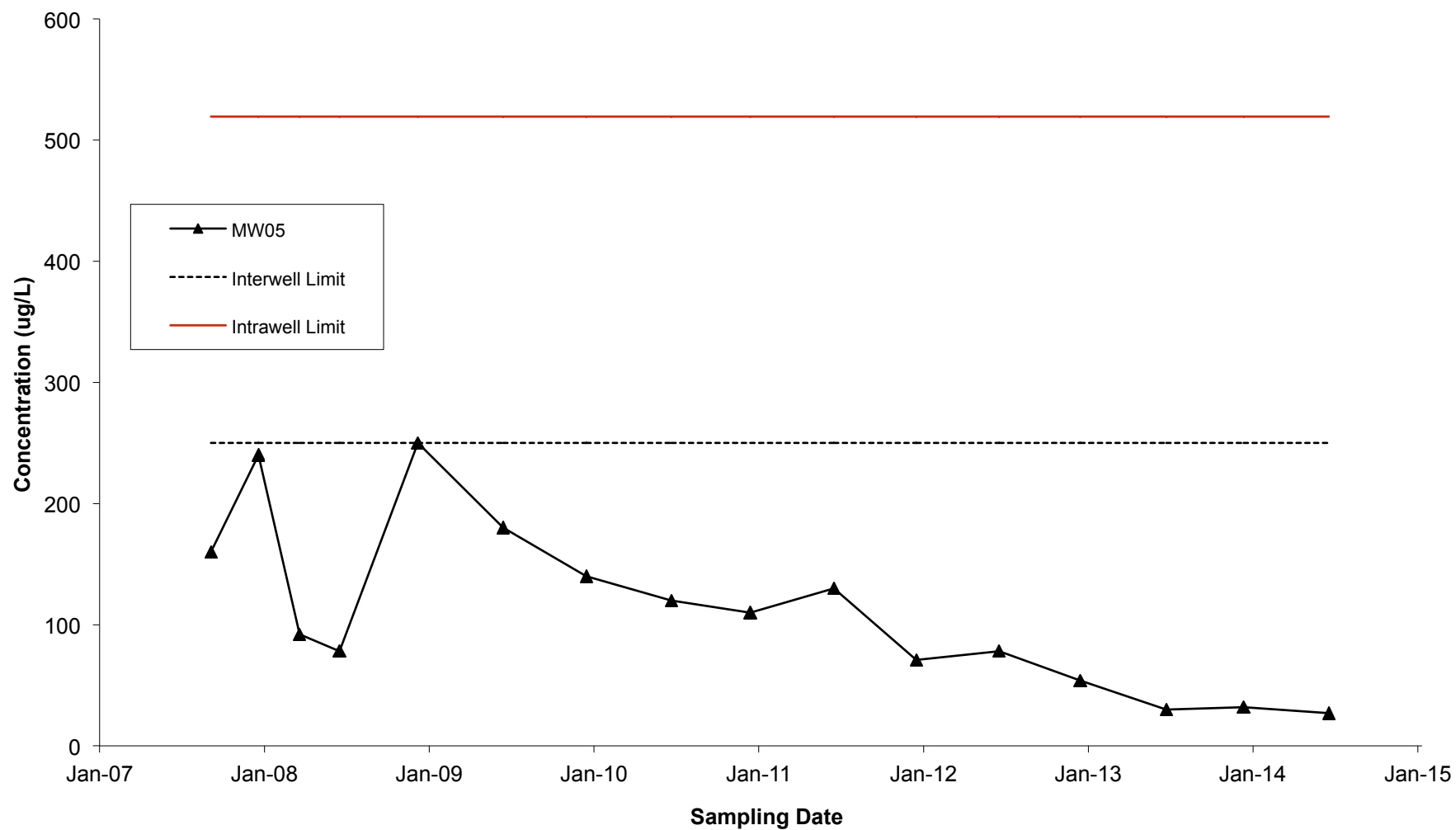
1,1-Dichloroethene in Well MW05 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



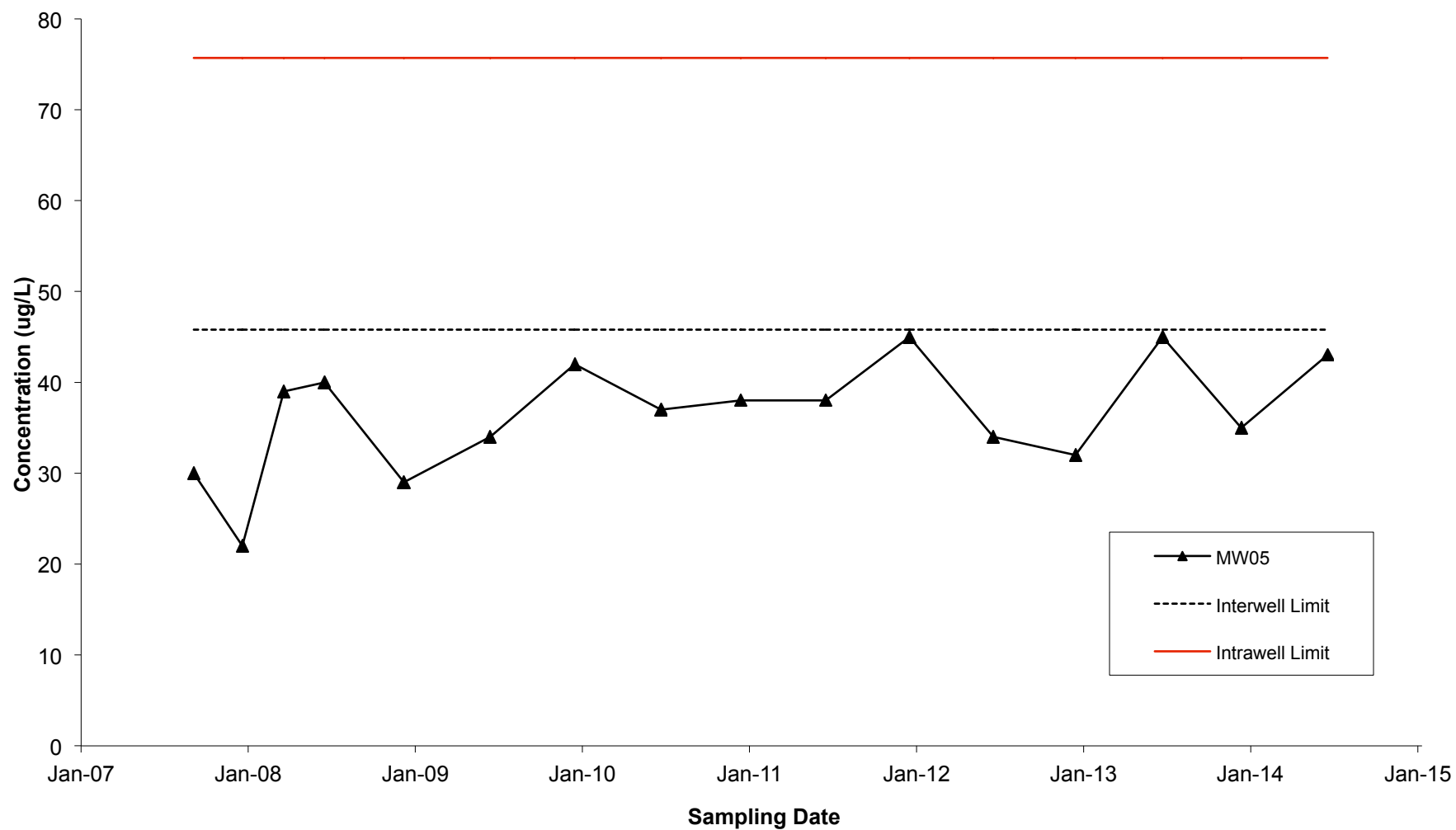
**cis-1,2-Dichloroethene in Well MW05
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



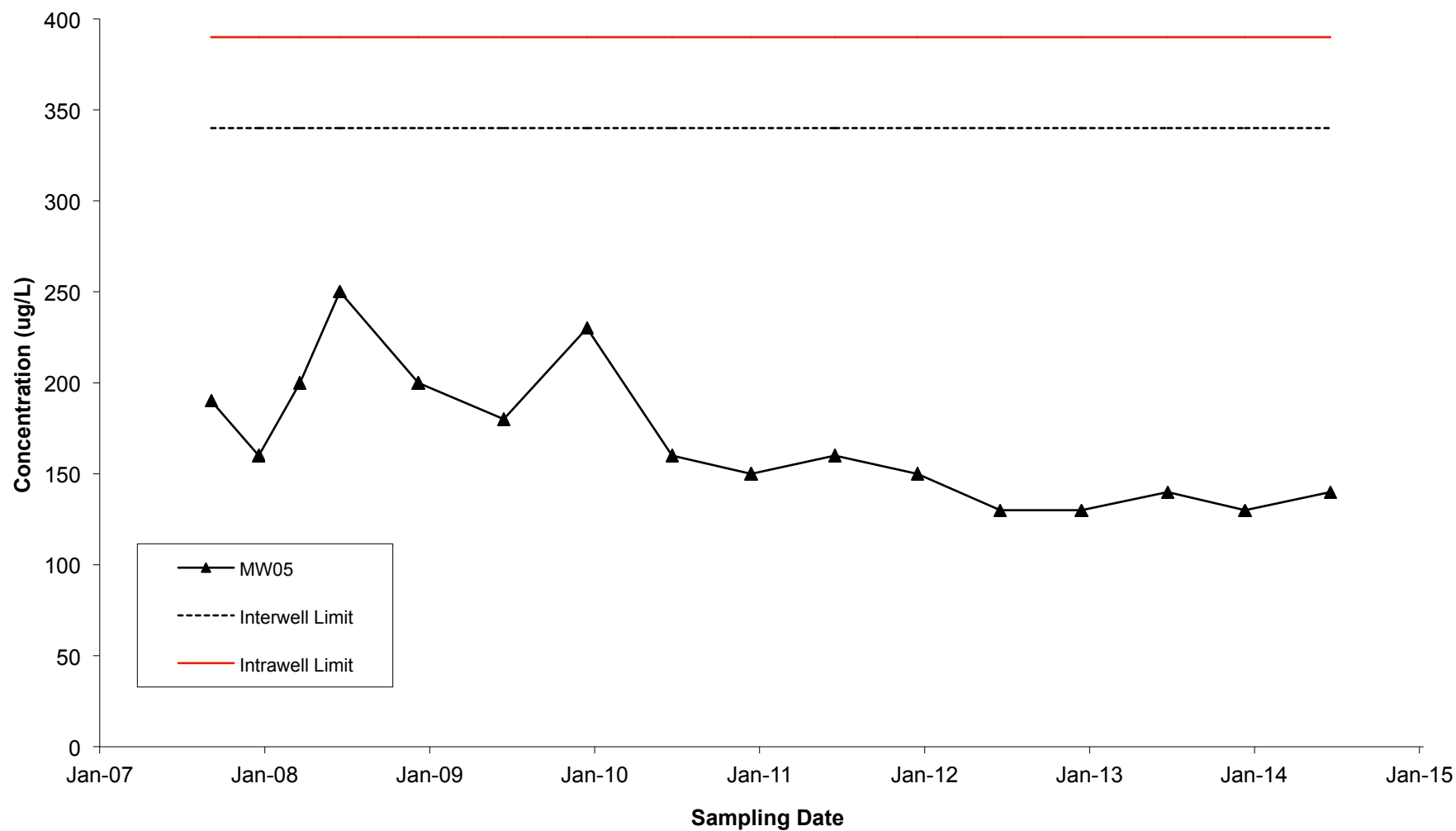
Tetrachloroethene in Well MW05 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



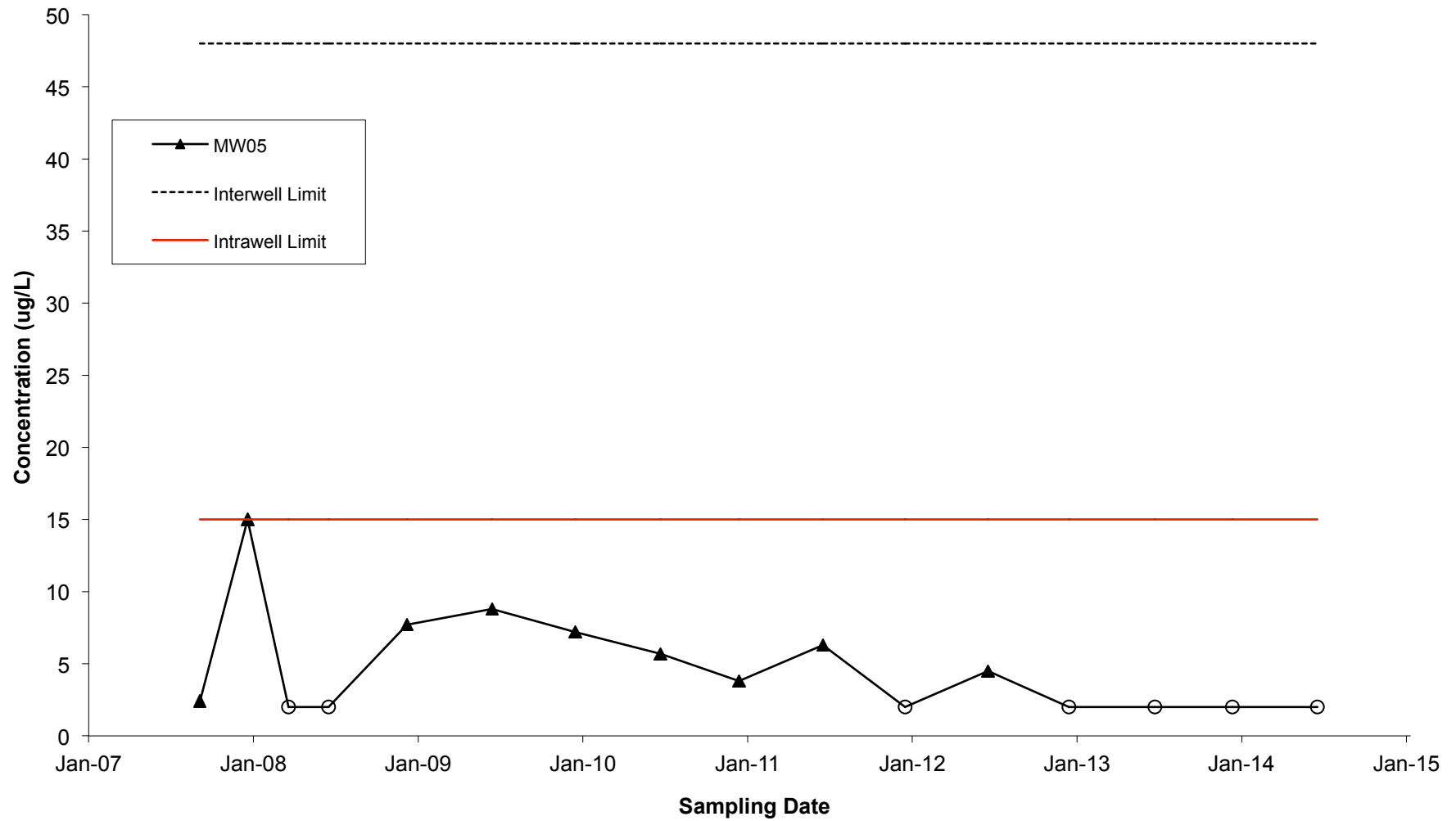
Trichloroethene in Well MW05 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



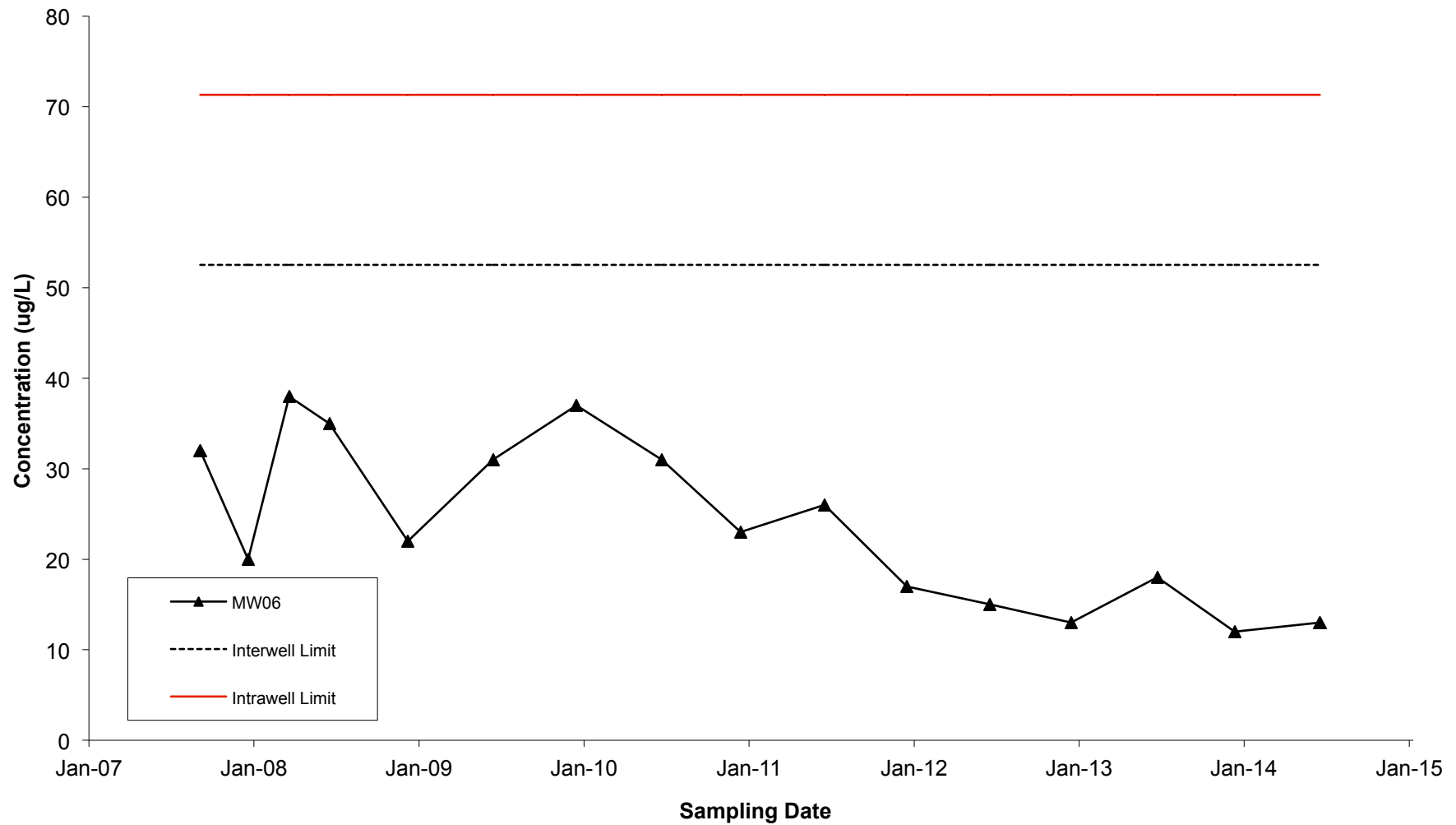
Vinyl Chloride in Well MW05 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



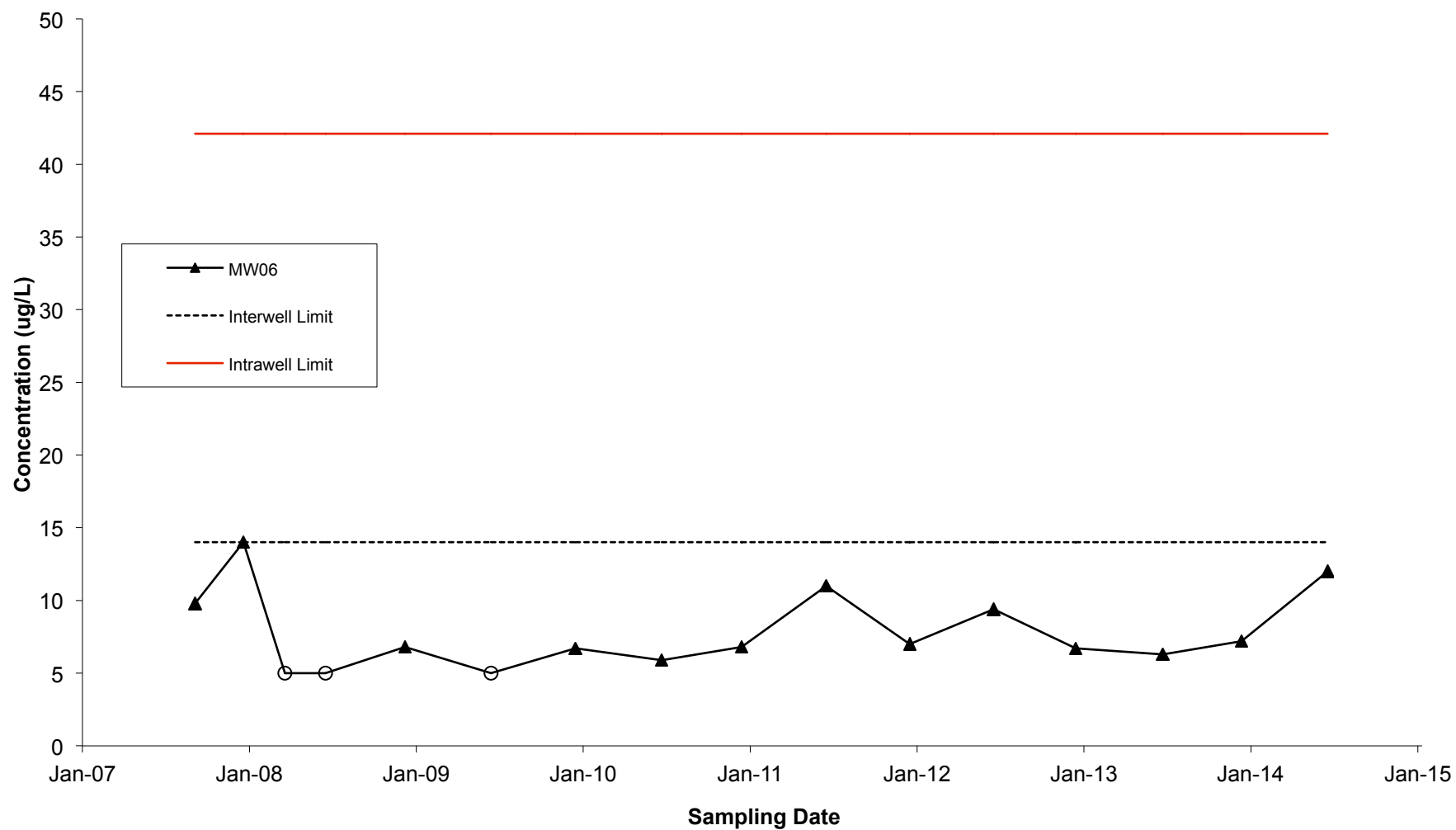
1,1,1-Trichloroethane in Well MW06 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



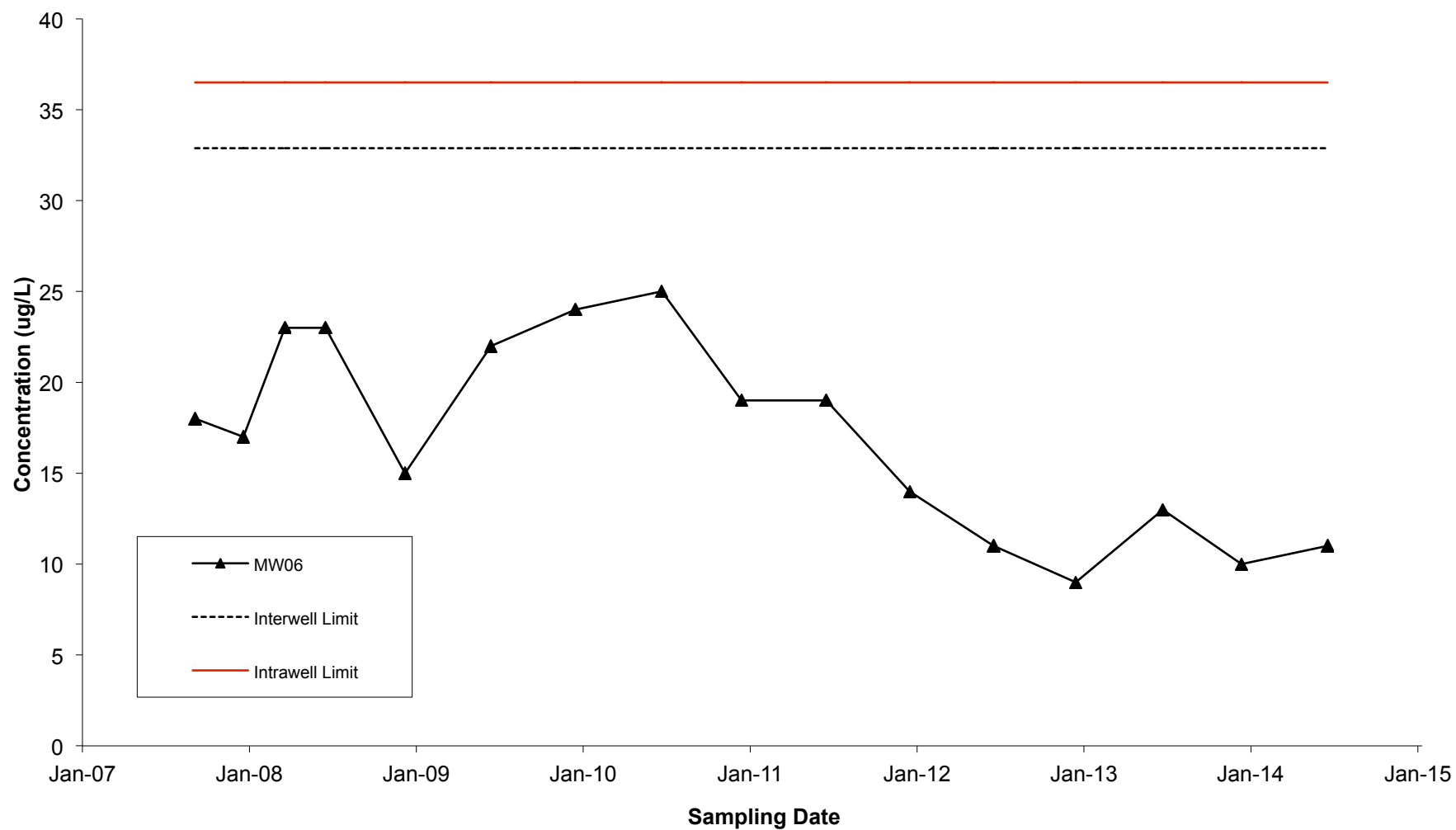
1,1-Dichloroethane in Well MW06 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



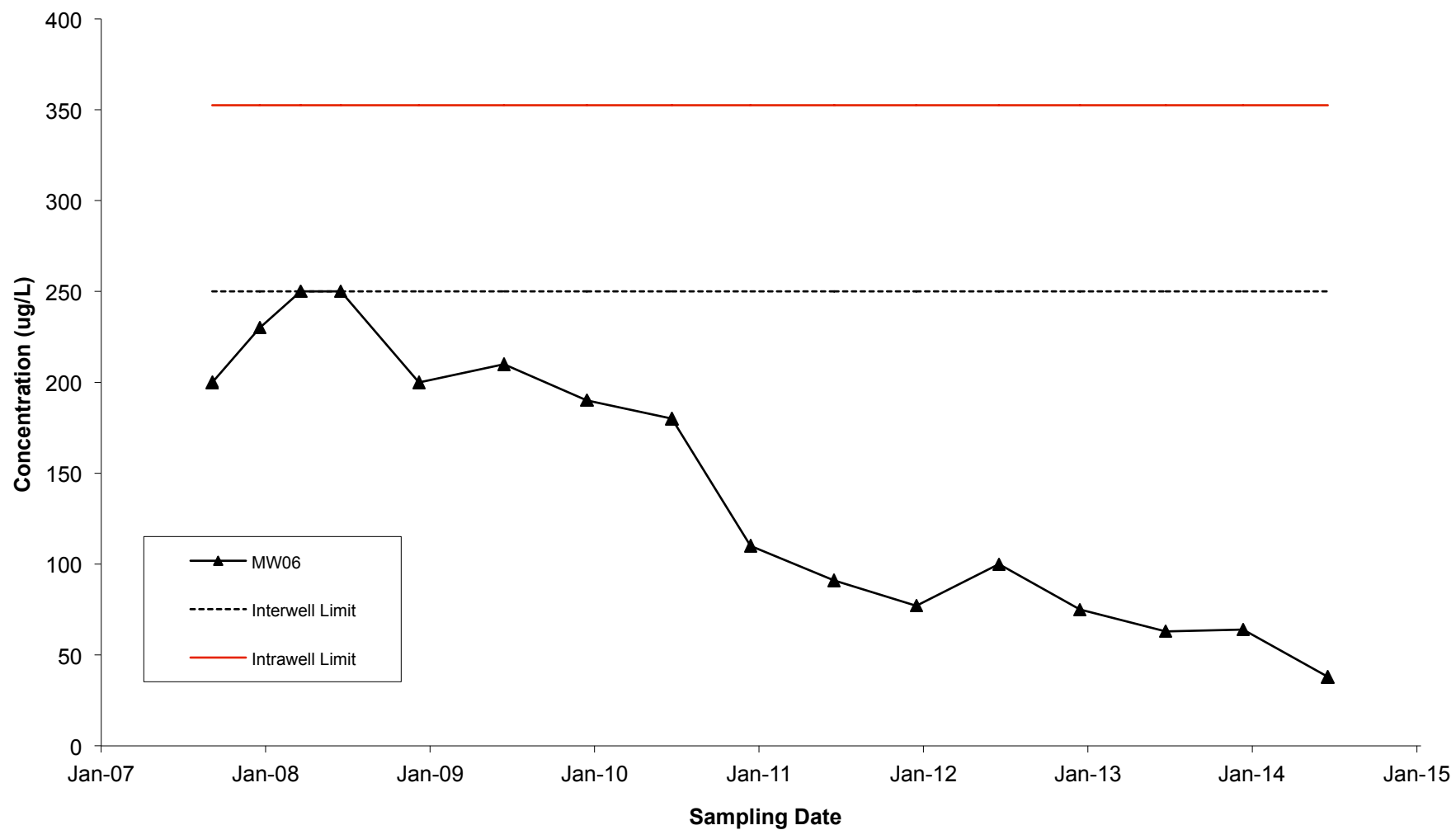
1,1-Dichloroethene in Well MW06 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



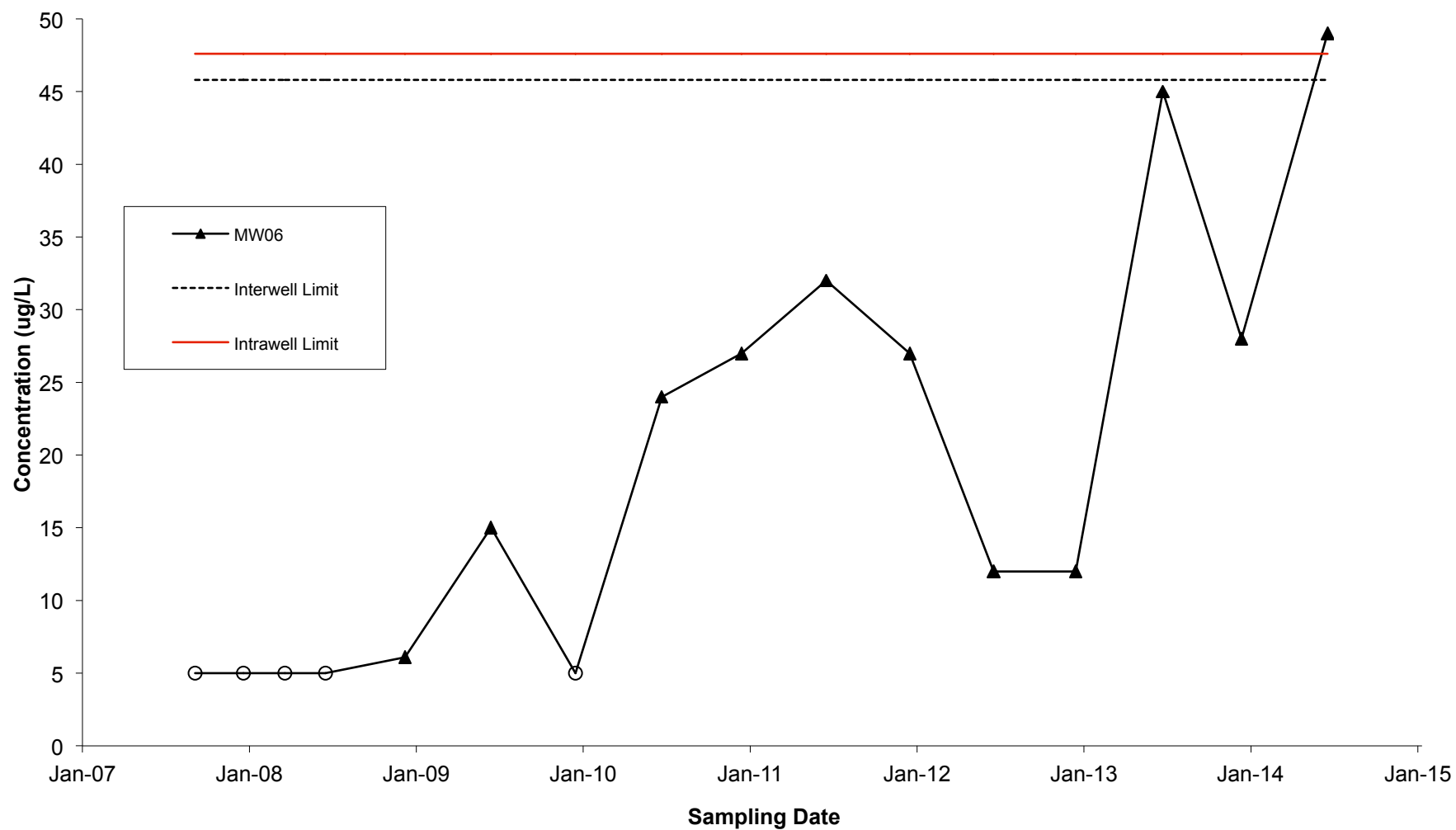
**cis-1,2-Dichloroethene in Well MW06
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



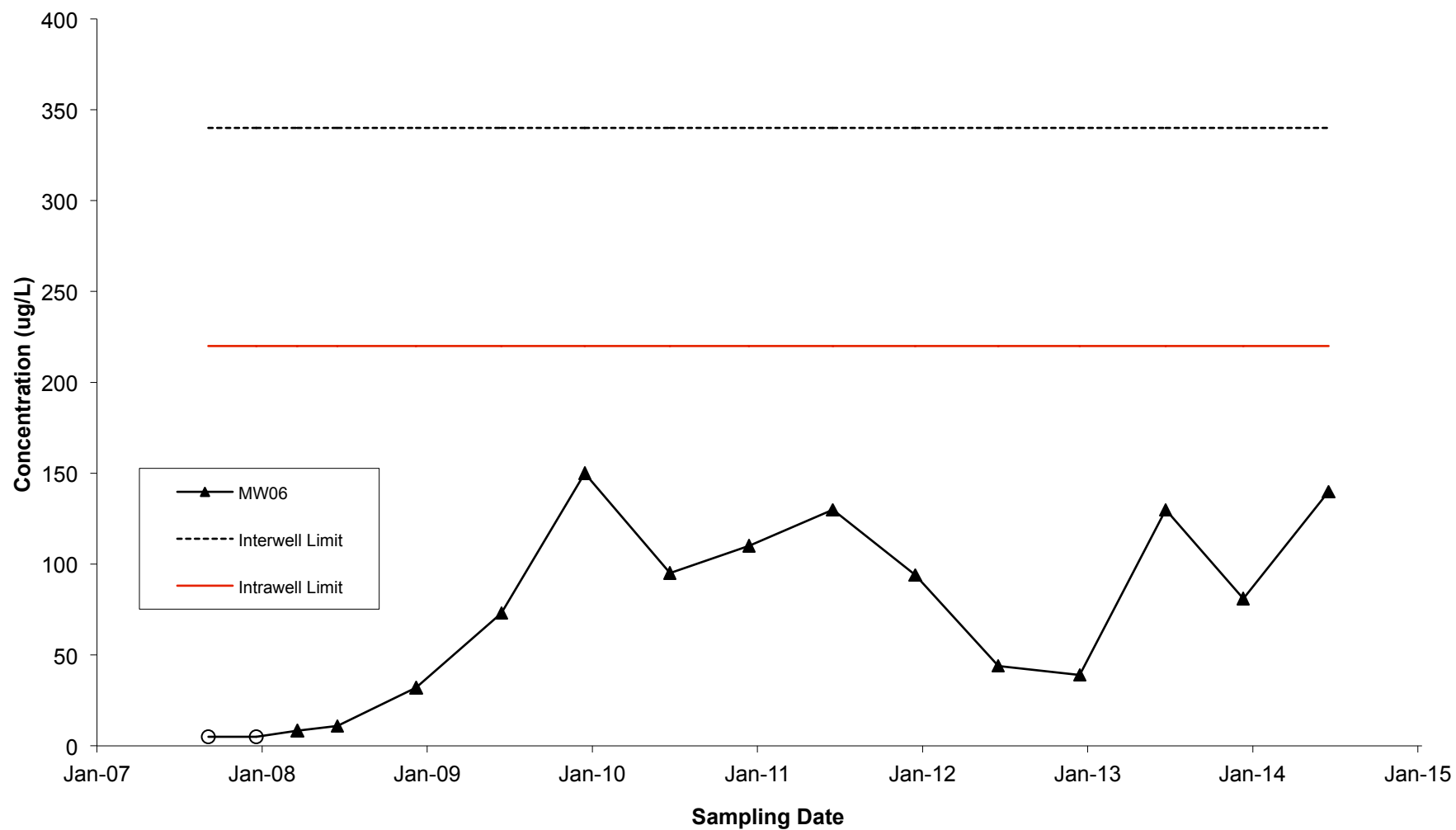
Tetrachloroethene in Well MW06 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



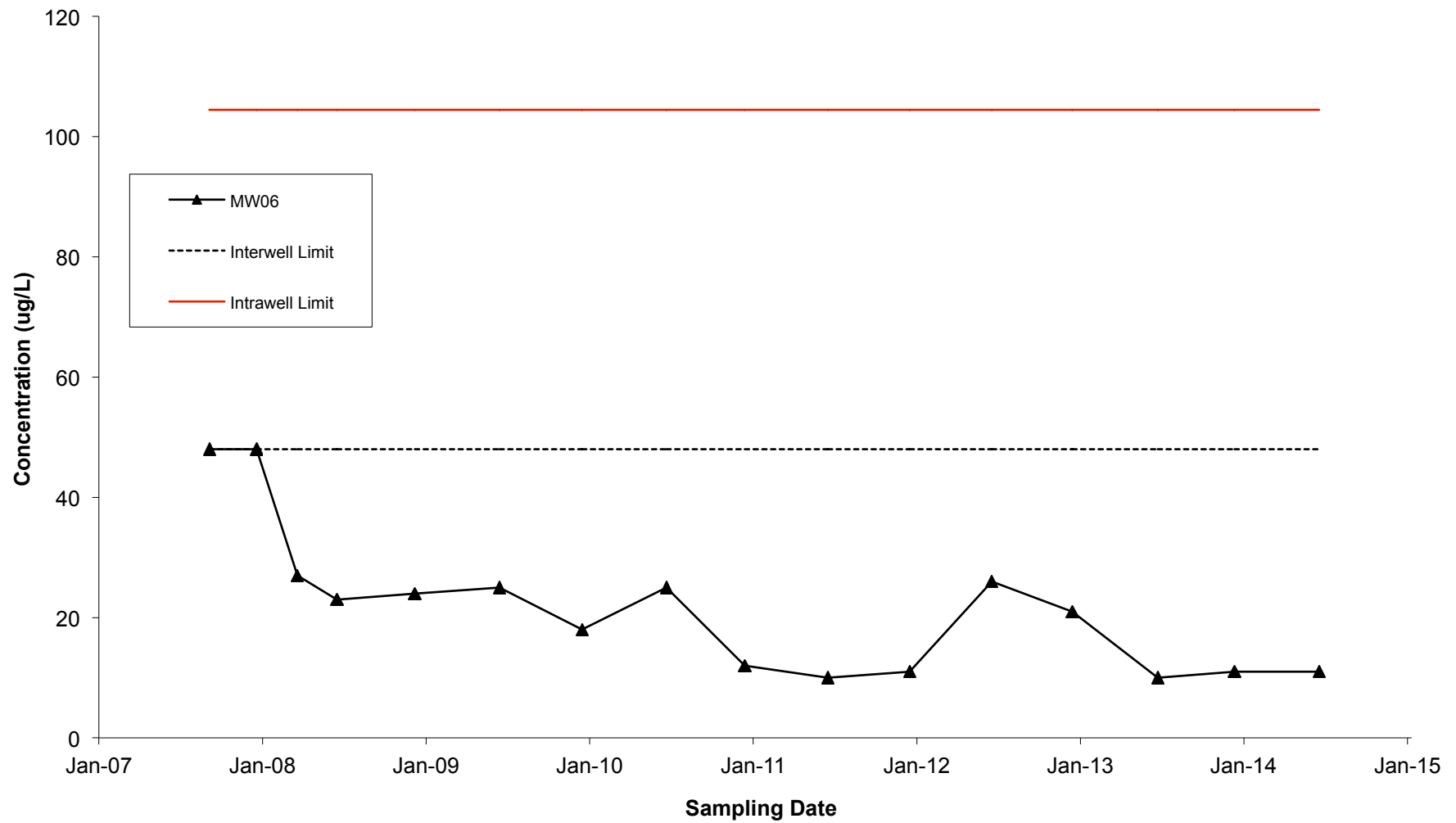
Trichloroethene in Well MW06 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



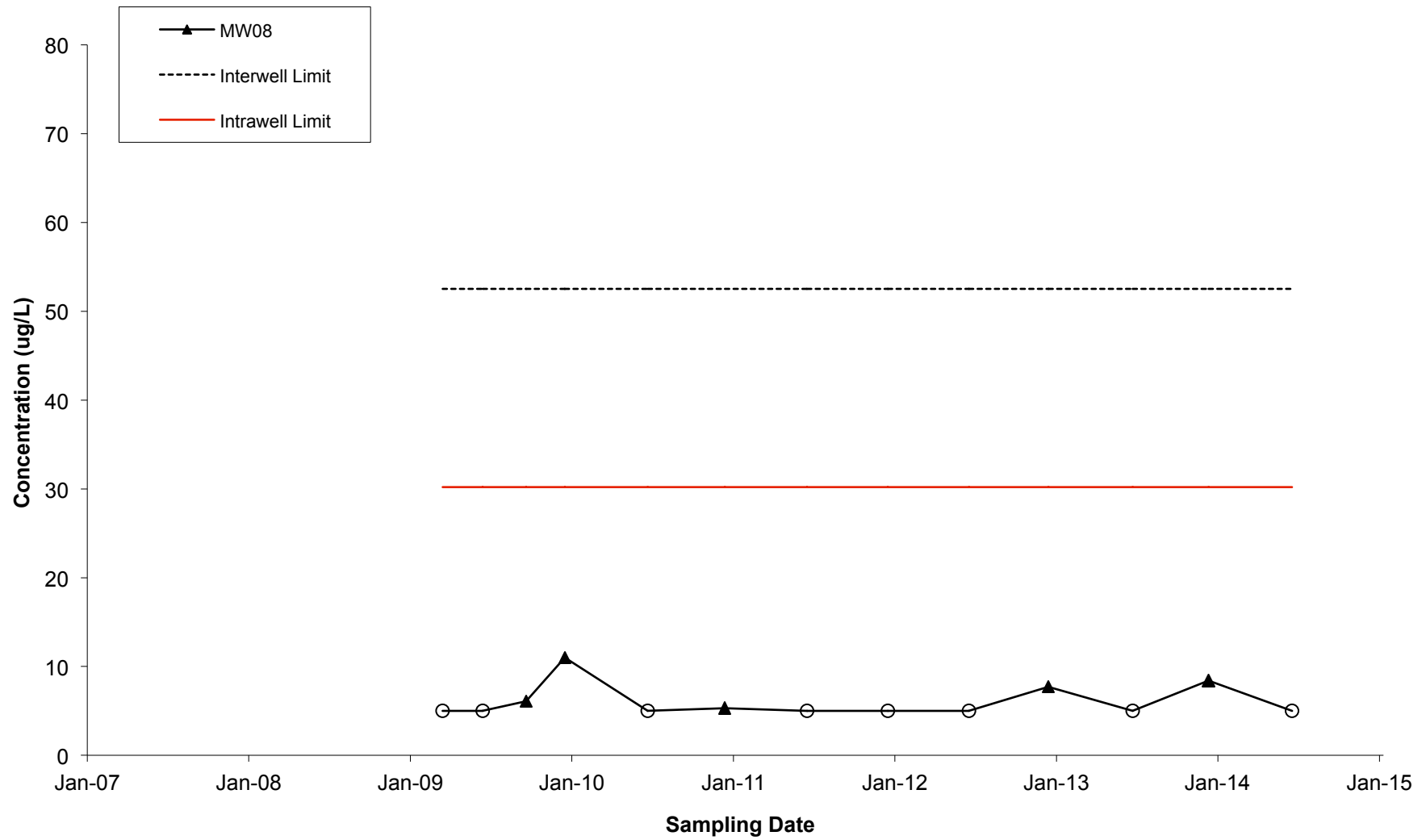
Vinyl Chloride in Well MW06 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



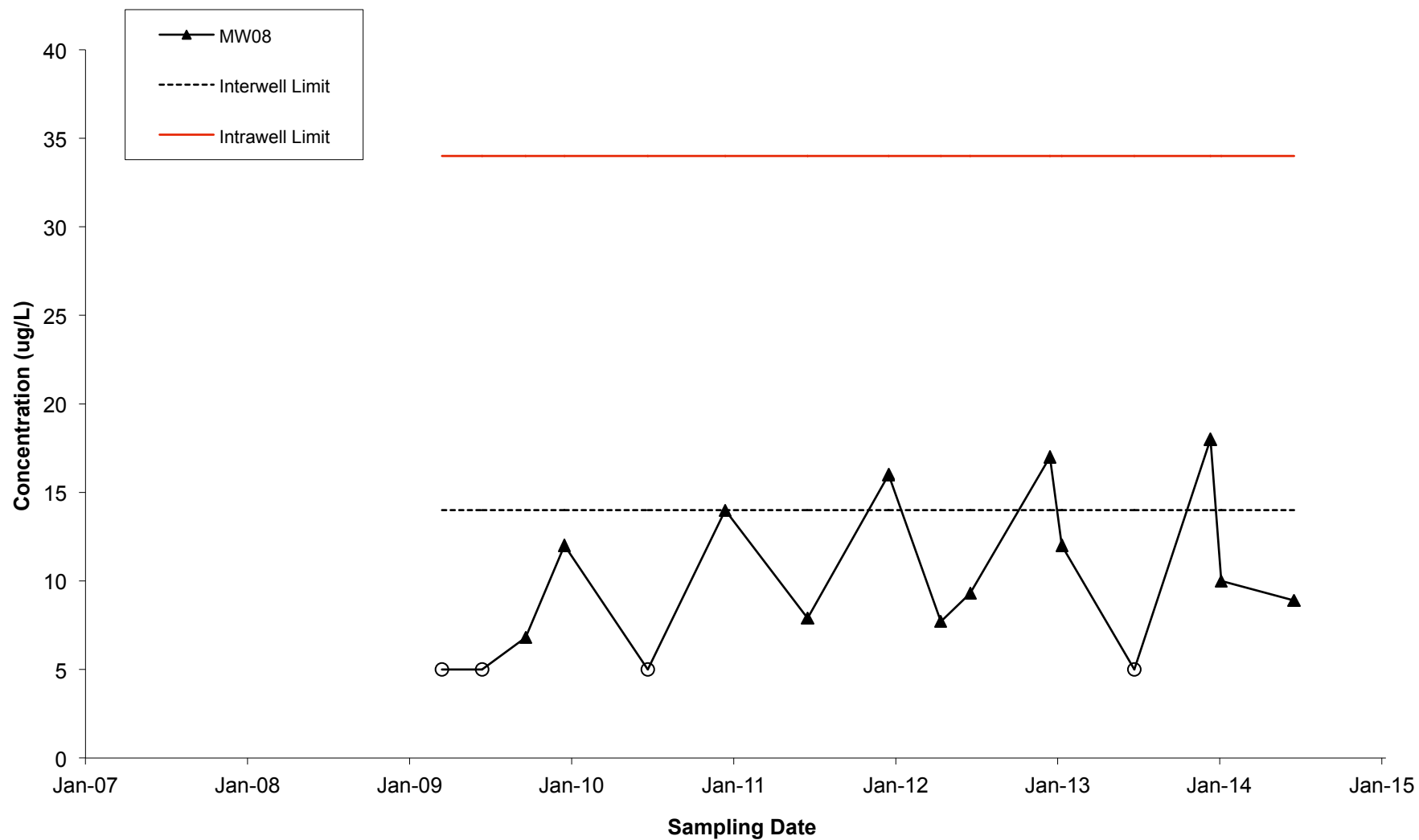
1,1,1-Trichloroethane in Well MW08 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



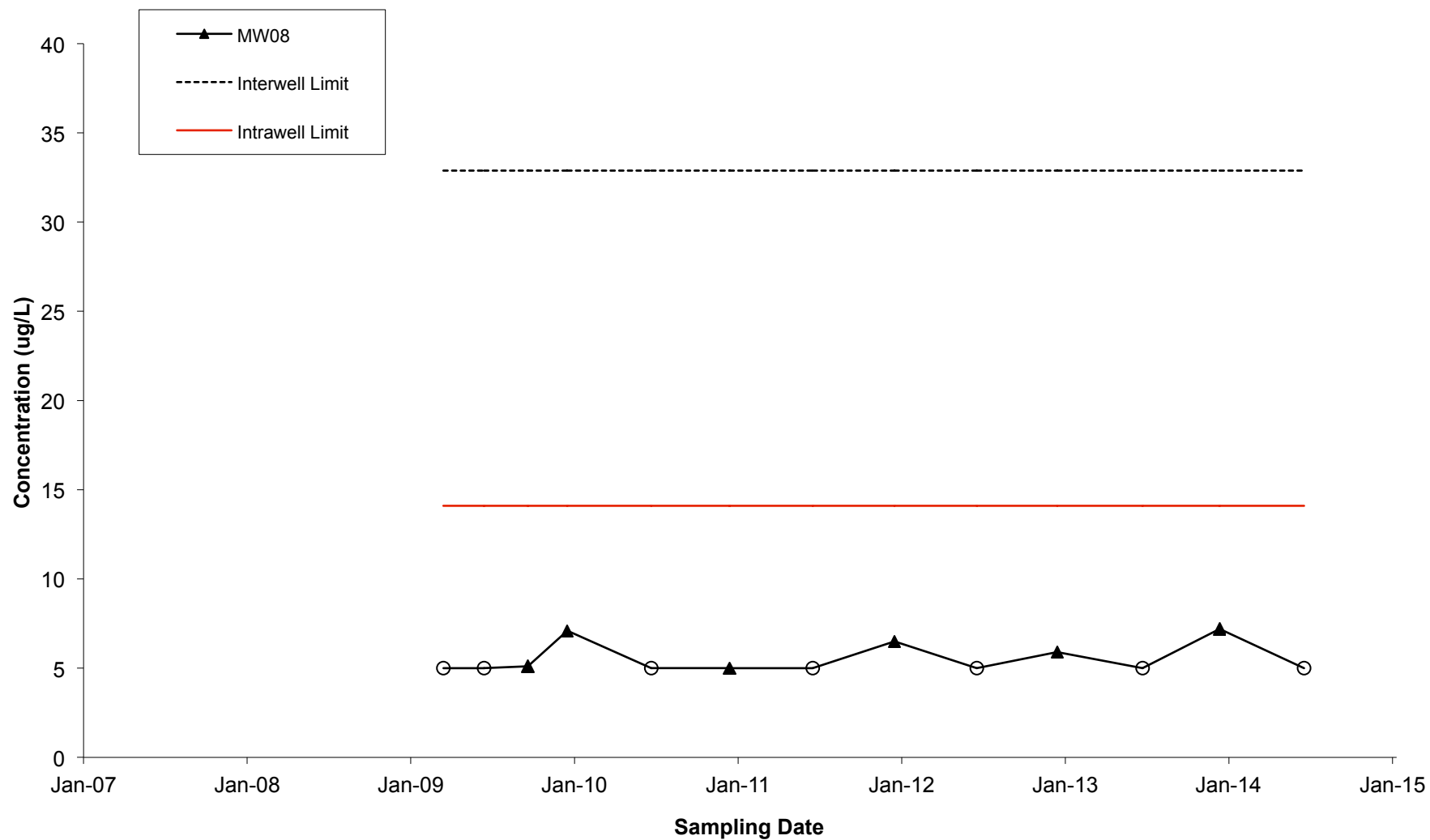
1,1-Dichloroethane in Well MW08 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



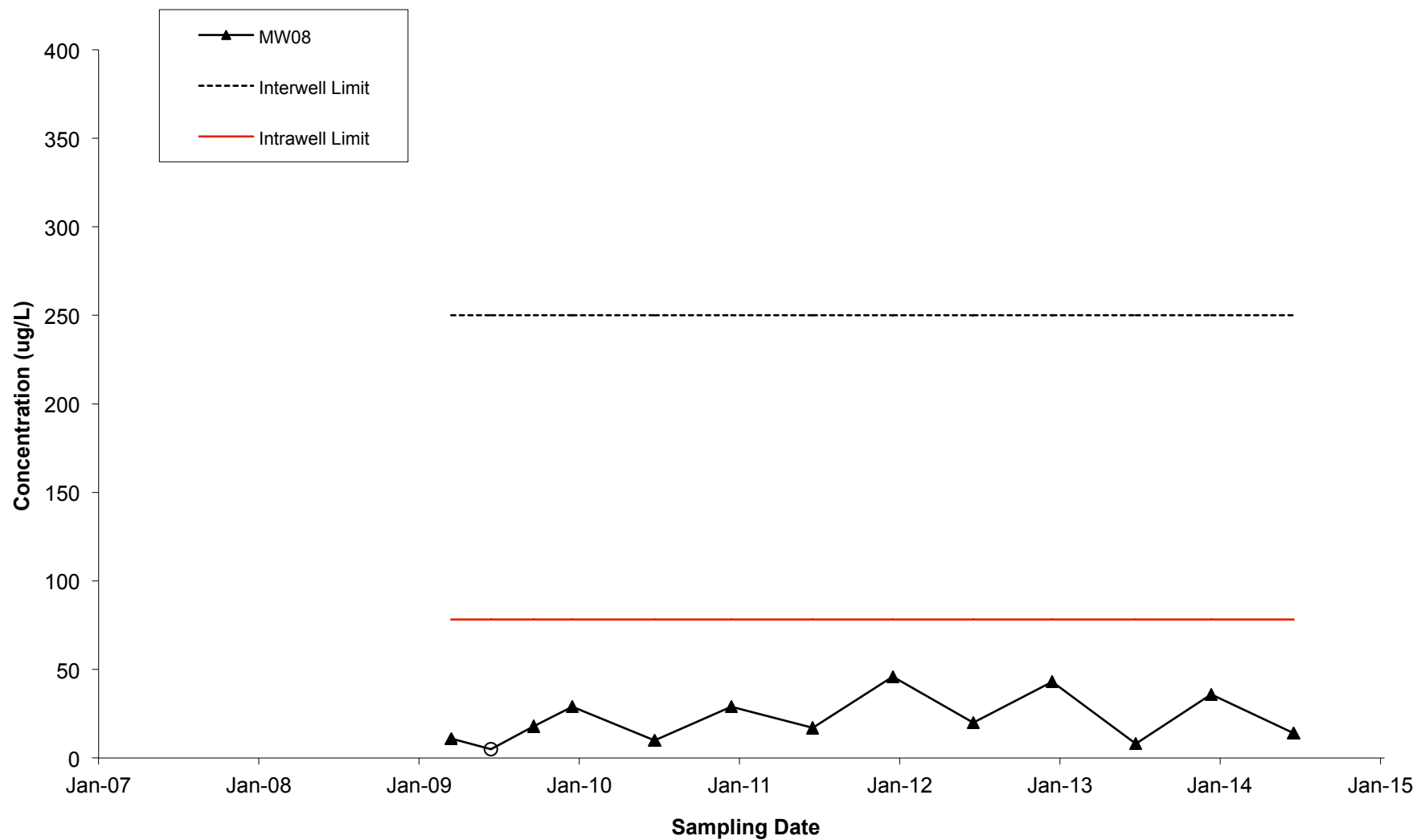
1,1-Dichloroethene in Well MW08 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



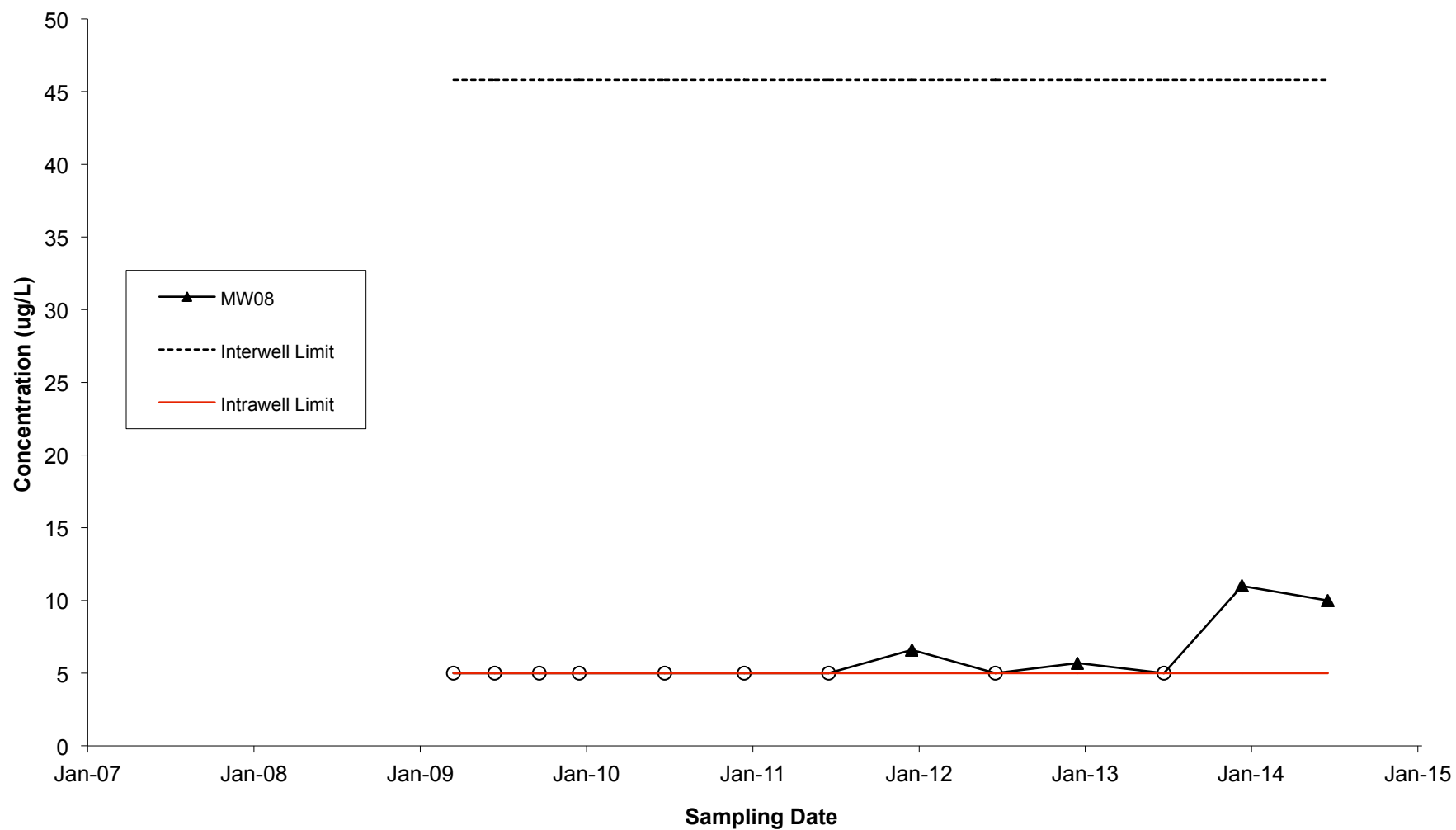
**cis-1,2-Dichloroethene in Well MW08
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



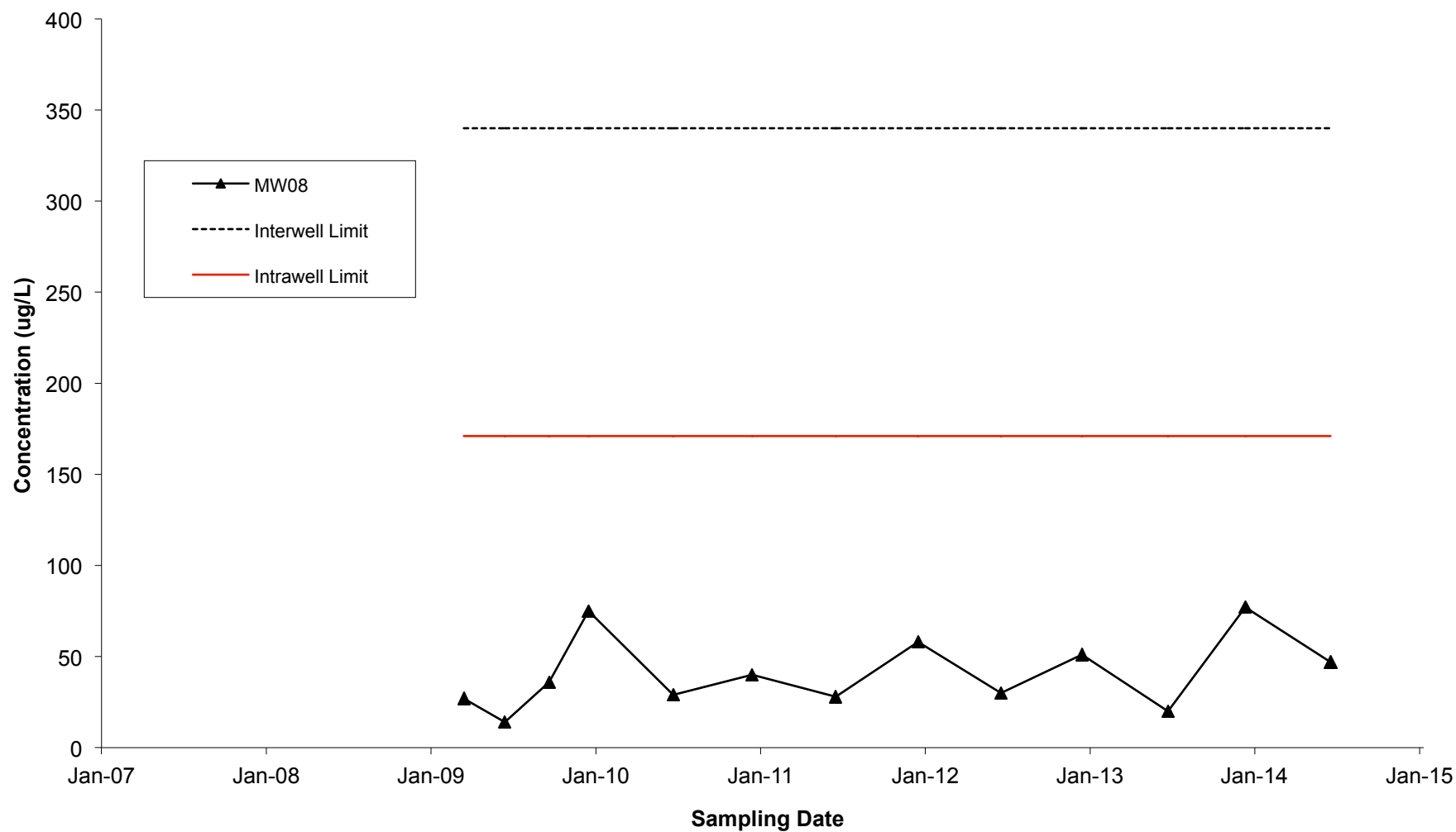
Tetrachloroethene in Well MW08 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



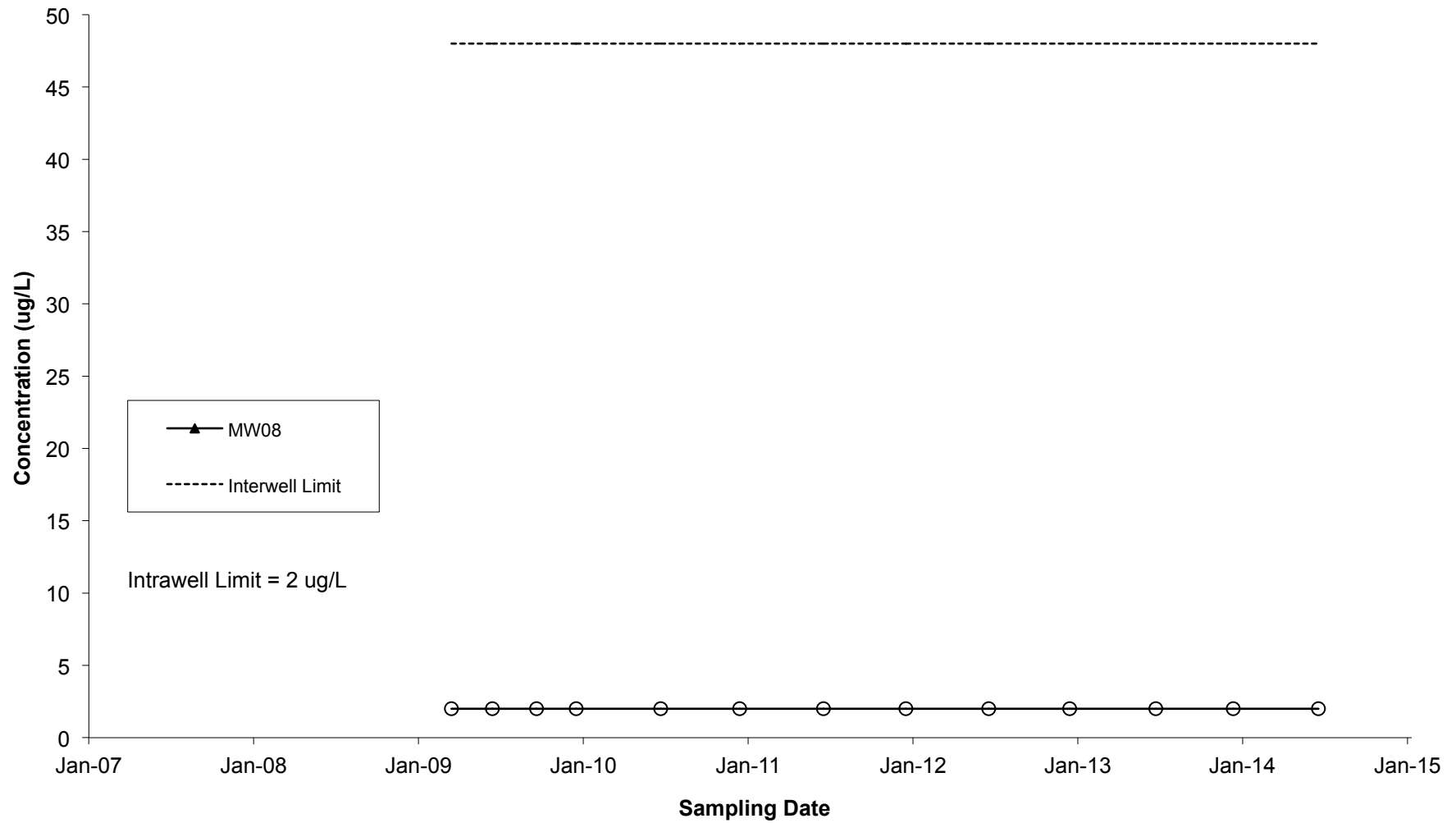
Trichloroethene in Well MW08 IPC/Roto-Rooter Landfill

Note: Non-detects are
marked with a clear circle.



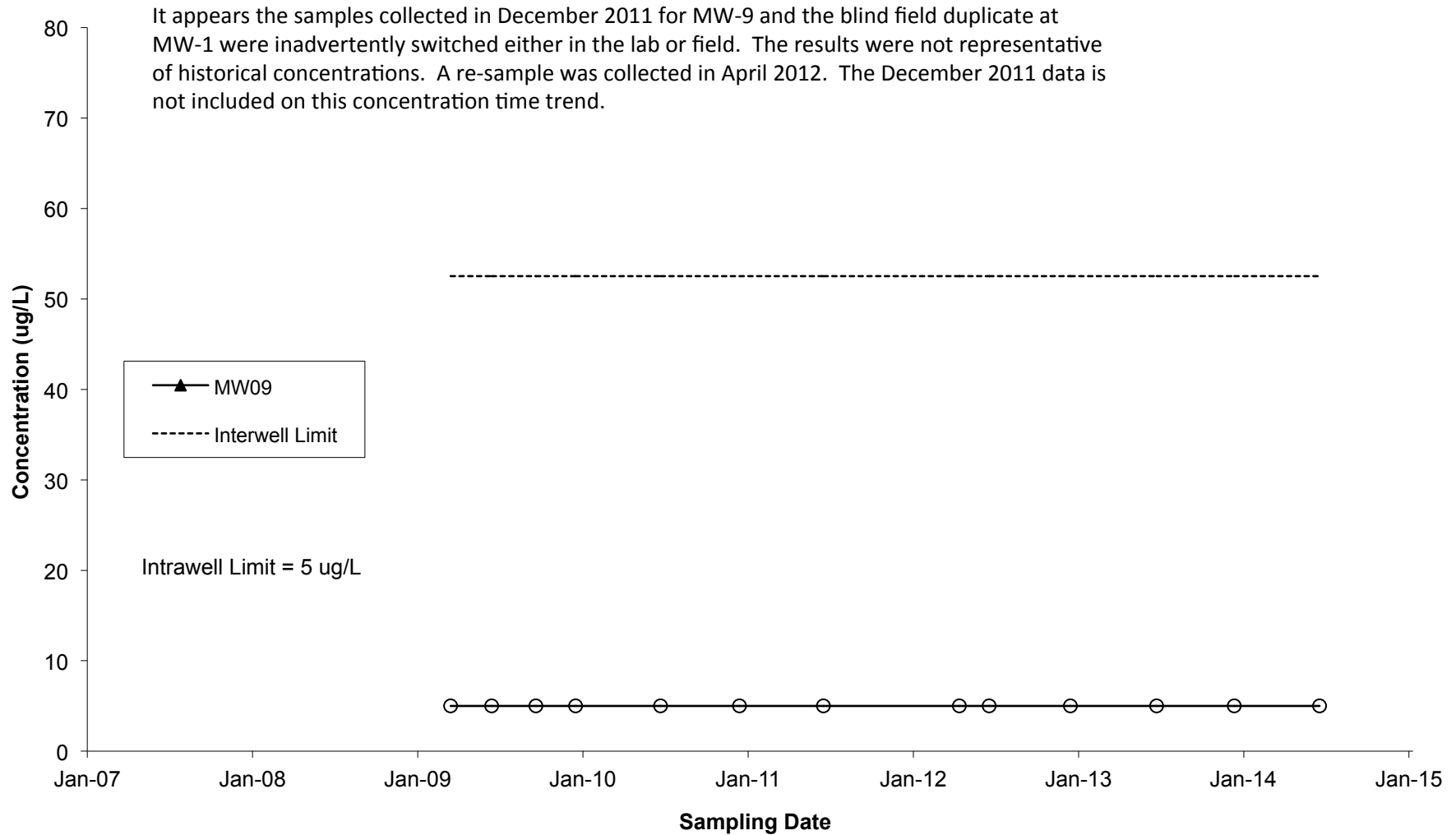
**Vinyl Chloride in Well MW08
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



1,1,1-Trichloroethane in Well MW09 IPC/Roto-Rooter Landfill

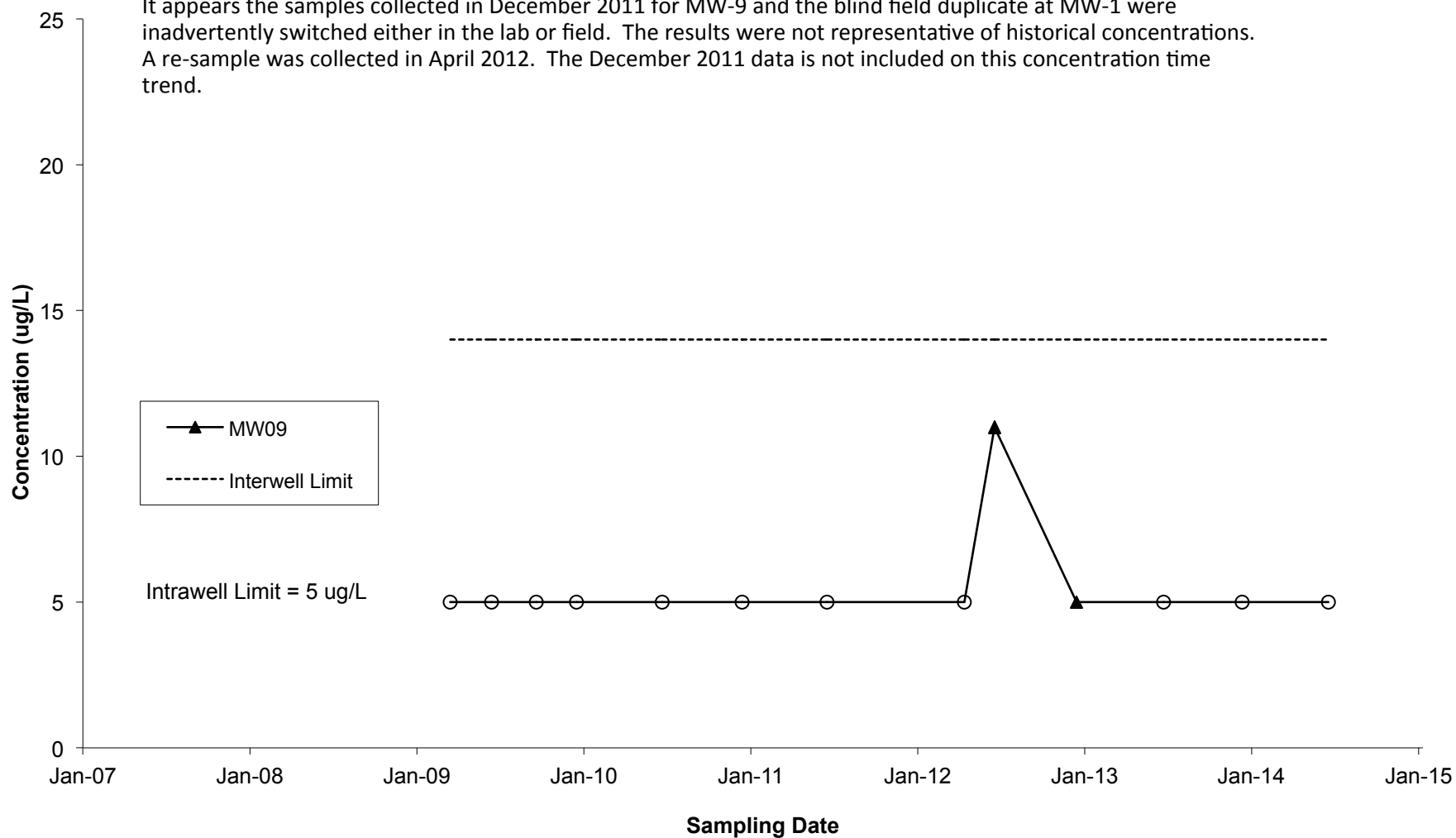
Note: Non-detects are marked with a clear circle.



1,1-Dichloroethane in Well MW09 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.

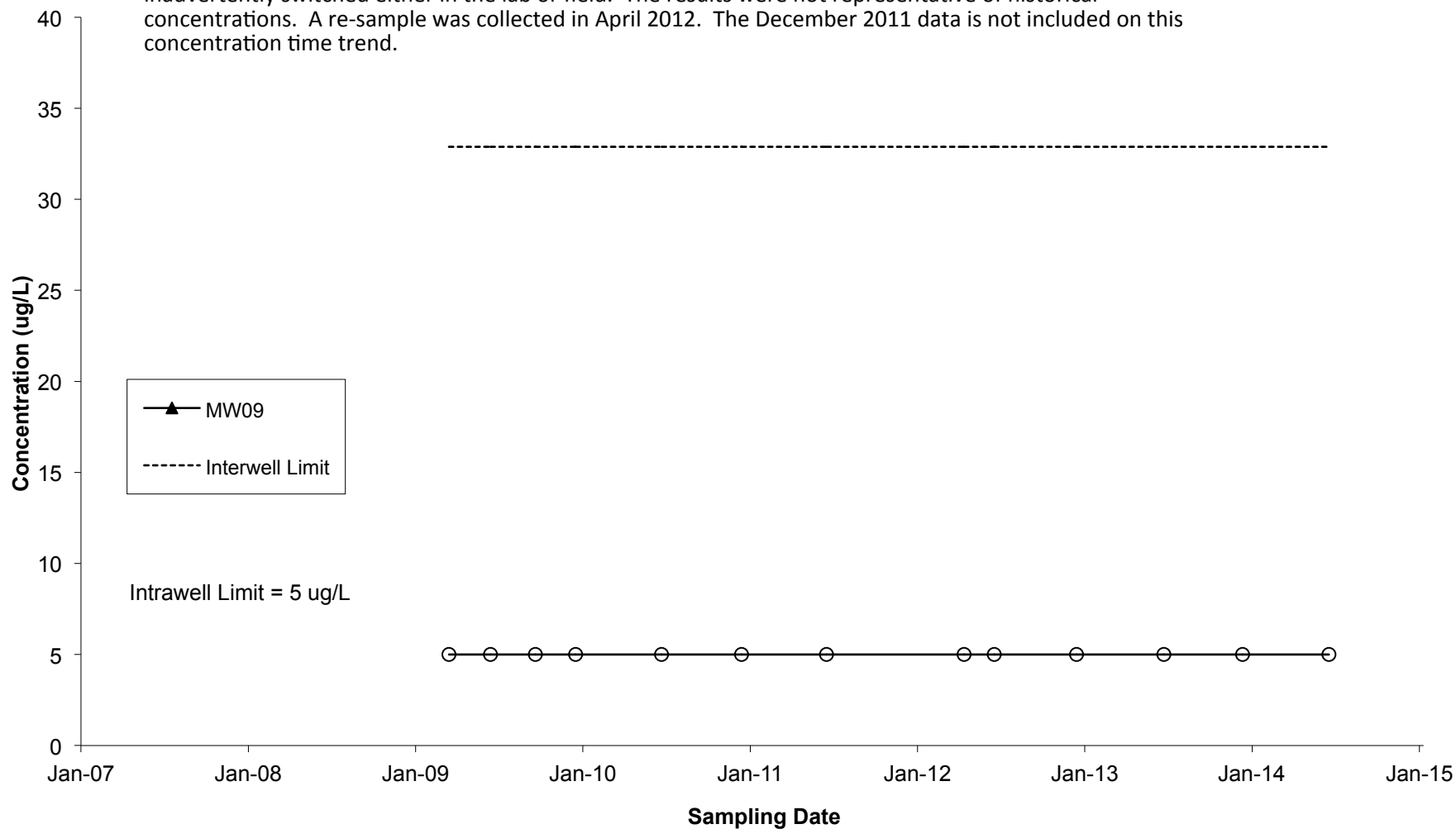
It appears the samples collected in December 2011 for MW-9 and the blind field duplicate at MW-1 were inadvertently switched either in the lab or field. The results were not representative of historical concentrations. A re-sample was collected in April 2012. The December 2011 data is not included on this concentration time trend.



1,1-Dichloroethene in Well MW09 IPC/Roto-Rooter Landfill

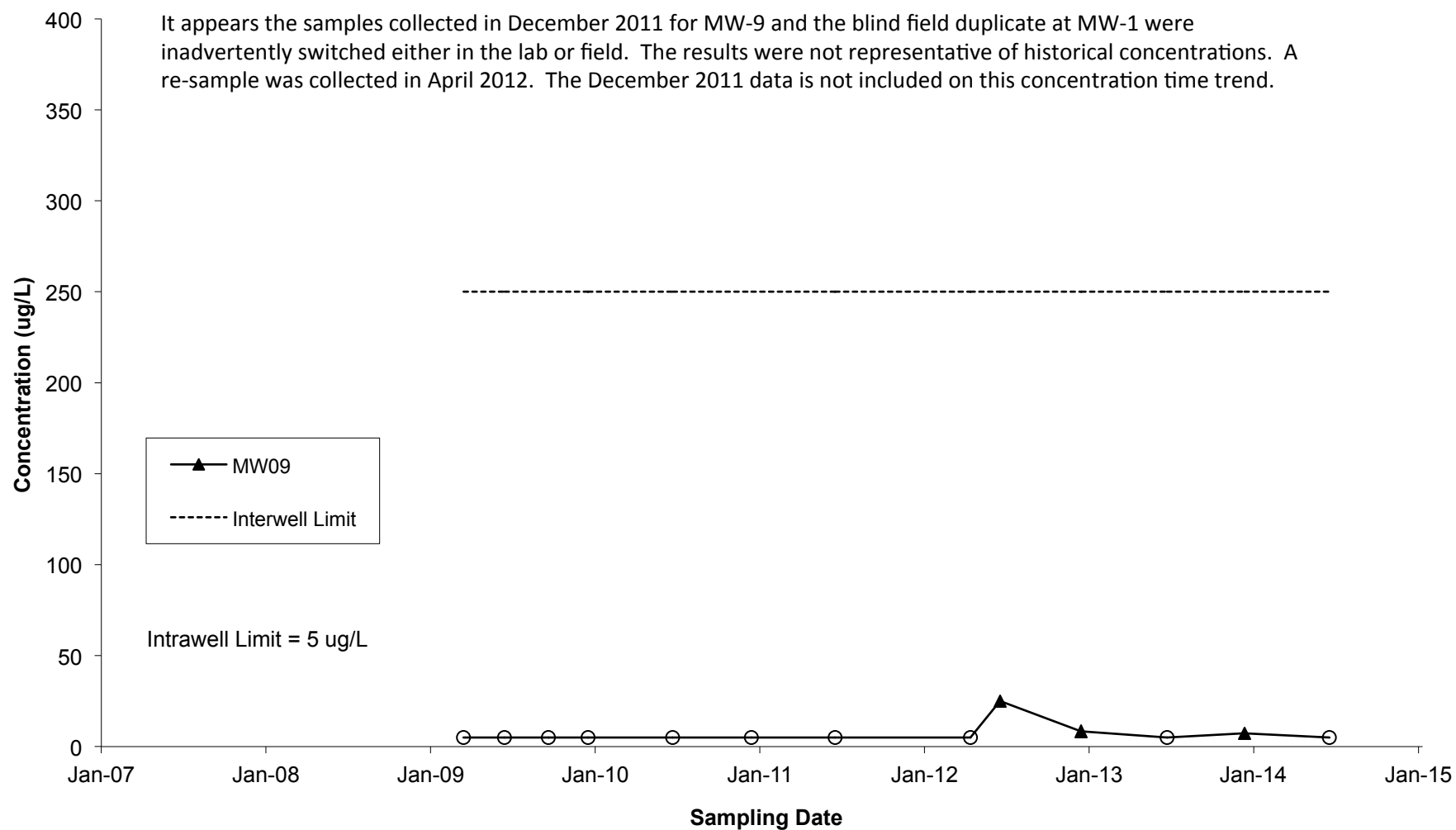
Note: Non-detects are marked with a clear circle.

It appears the samples collected in December 2011 for MW-9 and the blind field duplicate at MW-1 were inadvertently switched either in the lab or field. The results were not representative of historical concentrations. A re-sample was collected in April 2012. The December 2011 data is not included on this concentration time trend.



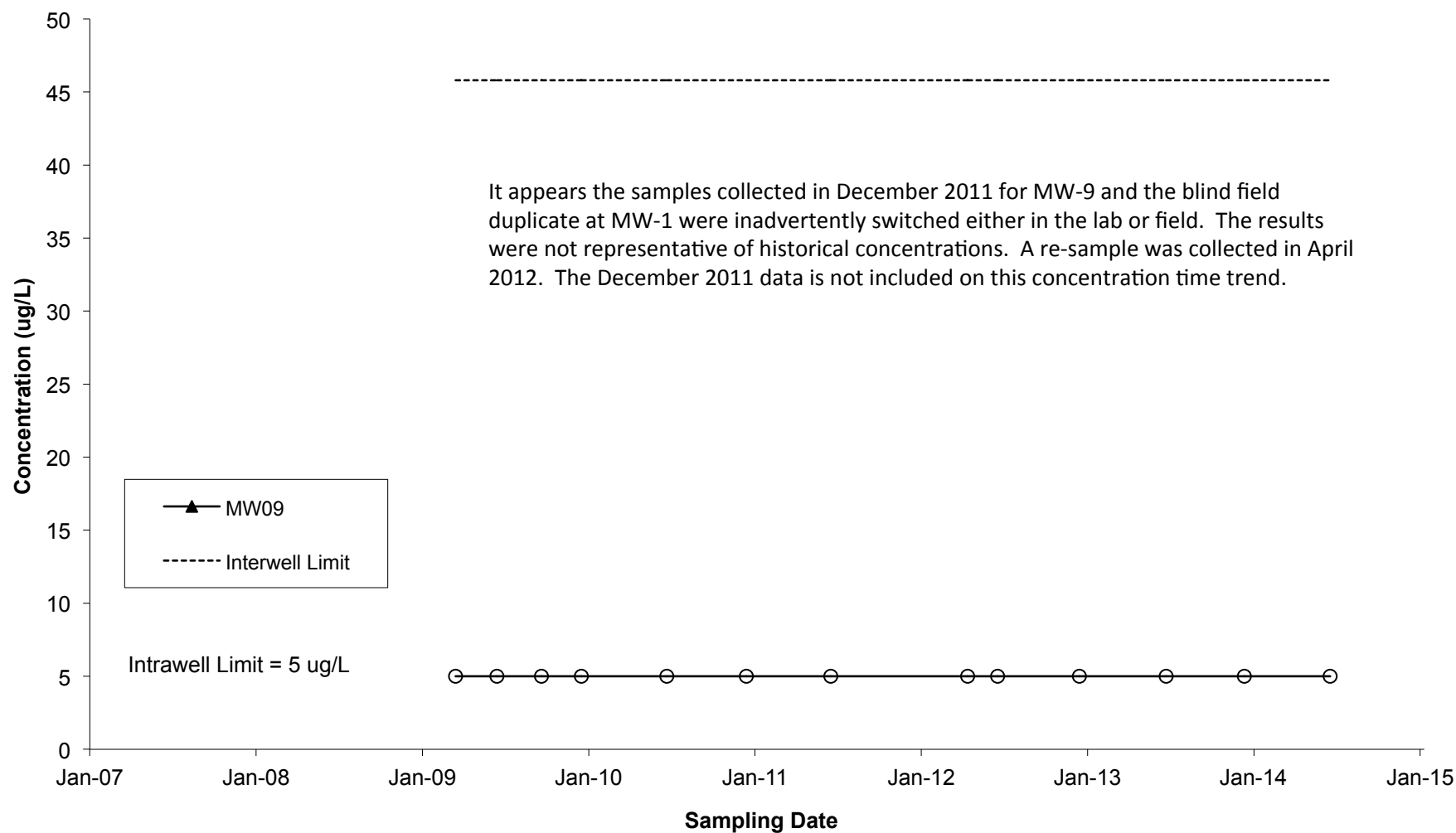
**cis-1,2-Dichloroethene in Well MW09
IPC/Roto-Rooter Landfill**

Note: Non-detects are
marked with a clear circle.



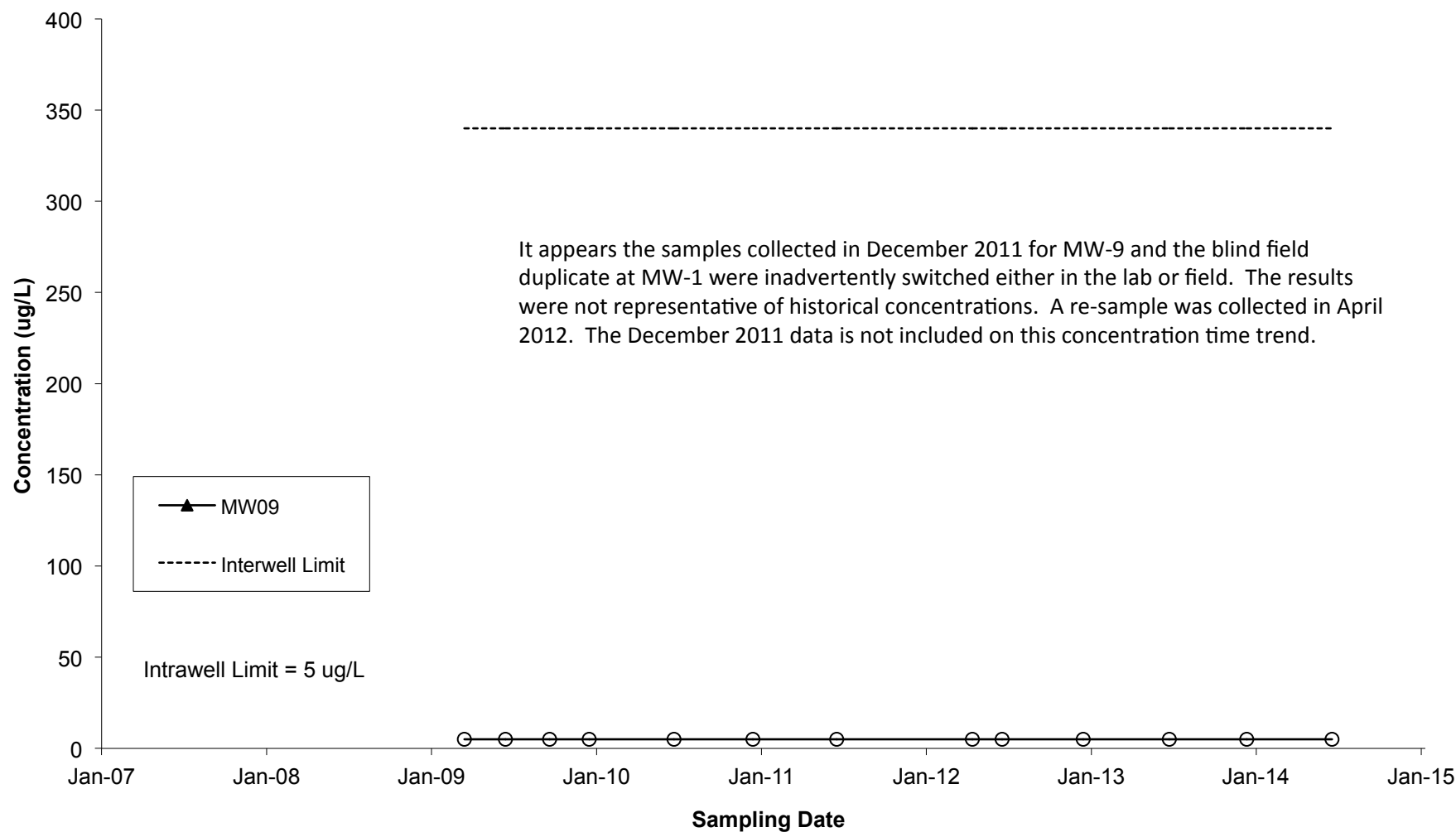
Tetrachloroethene in Well MW09 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



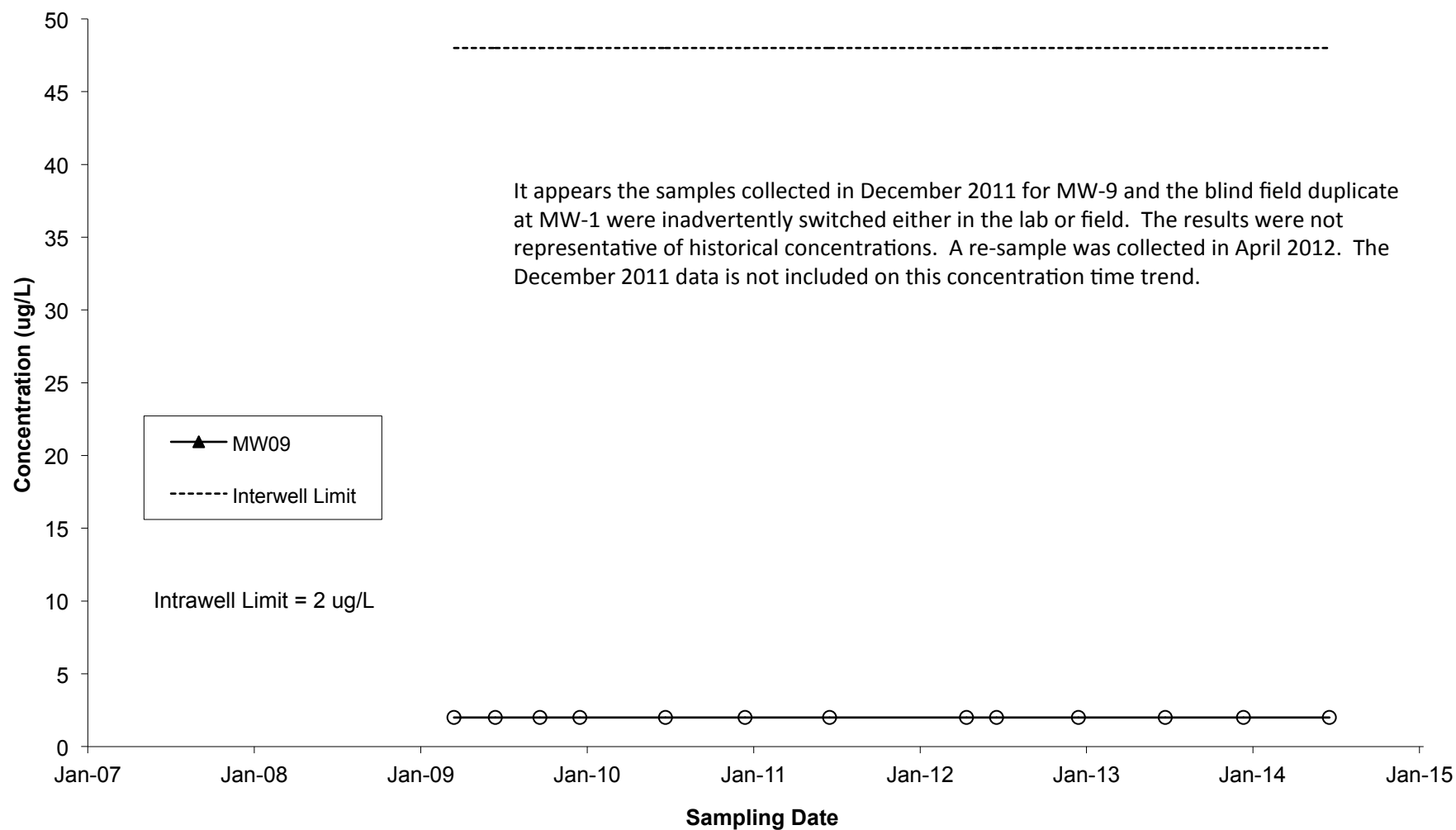
Trichloroethene in Well MW09 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



Vinyl Chloride in Well MW09 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



Attachment 6

Data Validation Summaries

Data Validation Checklist

Date:	1/2/2014
Validator Name:	Mary Pearson (EIL)
Facility:	Interstate Pollution Control - Roto Rooter
Facility Location:	Rockford, Illinois
Event:	Dec-13
Laboratory:	TestAmerica - Chicago
Sampling Dates:	12/16/2013
Laboratory Job No:	500-68720-1 (Analysis Batch Numbers 216908 and 216976)

Were the correct analytical methodologies used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

Blind field duplicate (MW7) was collected at MW1.

Note:

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) analyzed at well MW6. The MS/MSD recoveries were within the acceptance ranges for all compounds.

Duplicate Sample Evaluation
December 2013
IPC Roto-Rooter Site

Parameter	Sample Date	Units	MW1	Qualifier	Blind Field Duplicate	Qualifier	RPD
1,1,1-Trichloroethane	12/16/2013	ug/L	5.2		5	U	4%
1,1,2,2-Tetrachloroethane	12/16/2013	ug/L	5	U	5	U	0%
1,1,2-Trichloroethane	12/16/2013	ug/L	5	U	5	U	0%
1,1-Dichloroethane	12/16/2013	ug/L	14		13		7%
1,1-Dichloroethene	12/16/2013	ug/L	13		13		0%
1,2-Dichloroethane	12/16/2013	ug/L	5	U	5	U	0%
1,2-Dichloropropane	12/16/2013	ug/L	5	U	5	U	0%
2-Hexanone	12/16/2013	ug/L	20	U	20	U	0%
Acetone	12/16/2013	ug/L	20	U	20	U	0%
Benzene	12/16/2013	ug/L	5	U	5	U	0%
Bromodichloromethane	12/16/2013	ug/L	5	U	5	U	0%
Bromoform	12/16/2013	ug/L	5	U	5	U	0%
Bromomethane	12/16/2013	ug/L	5	U	5	U	0%
Carbon disulfide	12/16/2013	ug/L	5	U	5	U	0%
Carbon tetrachloride	12/16/2013	ug/L	5	U	5	U	0%
Chlorobenzene	12/16/2013	ug/L	5	U	5	U	0%
Chloroethane	12/16/2013	ug/L	5	U	5	U	0%
Chloroform	12/16/2013	ug/L	5	U	5	U	0%
Chloromethane	12/16/2013	ug/L	5	U	5	U	0%
cis-1,2-Dichloroethene	12/16/2013	ug/L	170		170		0%
cis-1,3-Dichloropropene	12/16/2013	ug/L	5	U	5	U	0%
Dibromochloromethane	12/16/2013	ug/L	5	U	5	U	0%
Ethylbenzene	12/16/2013	ug/L	5	U	5	U	0%
Methyl Ethyl Ketone	12/16/2013	ug/L	20	U	20	U	0%
Methyl Isobutyl Ketone	12/16/2013	ug/L	20	U	20	U	0%
Methylene Chloride	12/16/2013	ug/L	10	U	10	U	0%
Styrene	12/16/2013	ug/L	5	U	5	U	0%
Tetrachloroethene	12/16/2013	ug/L	5	U	5	U	0%
Toluene	12/16/2013	ug/L	5	U	5	U	0%
trans-1,2-Dichloroethene	12/16/2013	ug/L	5	U	5	U	0%
trans-1,3-Dichloropropene	12/16/2013	ug/L	5	U	5	U	0%
Trichloroethene	12/16/2013	ug/L	11		11		0%
Vinyl chloride	12/16/2013	ug/L	14		13		7%
Xylenes, Total	12/16/2013	ug/L	5	U	5	U	0%

Qualifier U - Not Detected

Chemicals of Concern are highlighted in gray.

The blind field duplicate (MW7) was taken at well MW1.

Data Validation Checklist

Date:	1/16/2014
Validator Name:	Mary Pearson (EIL)
Facility:	Interstate Pollution Control - Roto Rooter
Facility Location:	Rockford, Illinois
Event:	December 2013 Re-Sample
Laboratory:	TestAmerica - Chicago
Sampling Dates:	1/9/2014
Laboratory Job No:	500-69823-1 (Analysis Batch Number 219474)

Were the correct analytical methodologies used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

Field Duplicate Collected at MW8

Duplicate Sample Evaluation
December 2013 Re-Sample
IPC Roto-Rooter Site

Parameter	Sample Date	Units	MW8	Qualifier	MW8 Field Duplicate	Qualifier	RPD
1,1-Dichloroethane	1/9/2014	ug/L	10		11		9.5%

Data Validation Checklist

Date:	8/7/2014
Validator Name:	Mary Pearson (EIL)
Facility:	Interstate Pollution Control - Roto Rooter
Facility Location:	Rockford, Illinois
Event:	Jun-14
Laboratory:	TestAmerica - Chicago
Sampling Dates:	6/23/2014
Laboratory Job No:	500-79349-1 (Analysis Batch Number 242572)

Were the correct analytical methodologies used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

Blind field duplicate (MW7) was collected at MW1.

Note:

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) analyzed at well MW6. The MS/MSD recoveries were within the acceptance ranges for all compounds.

Duplicate Sample Evaluation
June 2014
IPC Roto-Rooter Site

Parameter	Sample Date	Units	MW1	Qualifier	Blind Field Duplicate	Qualifier	RPD
1,1,1-Trichloroethane	6/23/2014	ug/L	5	U	5	U	0%
1,1,2,2-Tetrachloroethane	6/23/2014	ug/L	5	U	5	U	0%
1,1,2-Trichloroethane	6/23/2014	ug/L	5	U	5	U	0%
1,1-Dichloroethane	6/23/2014	ug/L	14		14		0%
1,1-Dichloroethene	6/23/2014	ug/L	9.7		9.5		2%
1,2-Dichloroethane	6/23/2014	ug/L	5	U	5	U	0%
1,2-Dichloropropane	6/23/2014	ug/L	5	U	5	U	0%
2-Hexanone	6/23/2014	ug/L	20	U	20	U	0%
Acetone	6/23/2014	ug/L	20	U	20	U	0%
Benzene	6/23/2014	ug/L	5	U	5	U	0%
Bromodichloromethane	6/23/2014	ug/L	5	U	5	U	0%
Bromoform	6/23/2014	ug/L	5	U	5	U	0%
Bromomethane	6/23/2014	ug/L	5	U	5	U	0%
Carbon disulfide	6/23/2014	ug/L	5	U	5	U	0%
Carbon tetrachloride	6/23/2014	ug/L	5	U	5	U	0%
Chlorobenzene	6/23/2014	ug/L	5	U	5	U	0%
Chloroethane	6/23/2014	ug/L	5	U	5	U	0%
Chloroform	6/23/2014	ug/L	5	U	5	U	0%
Chloromethane	6/23/2014	ug/L	5	U	5	U	0%
cis-1,2-Dichloroethene	6/23/2014	ug/L	160		160		0%
cis-1,3-Dichloropropene	6/23/2014	ug/L	5	U	5	U	0%
Dibromochloromethane	6/23/2014	ug/L	5	U	5	U	0%
Ethylbenzene	6/23/2014	ug/L	5	U	5	U	0%
Methyl Ethyl Ketone	6/23/2014	ug/L	20	U	20	U	0%
Methyl Isobutyl Ketone	6/23/2014	ug/L	20	U	20	U	0%
Methylene Chloride	6/23/2014	ug/L	10	U	10	U	0%
Styrene	6/23/2014	ug/L	5	U	5	U	0%
Tetrachloroethene	6/23/2014	ug/L	5	U	5	U	0%
Toluene	6/23/2014	ug/L	5	U	5	U	0%
trans-1,2-Dichloroethene	6/23/2014	ug/L	5	U	5	U	0%
trans-1,3-Dichloropropene	6/23/2014	ug/L	5	U	5	U	0%
Trichloroethene	6/23/2014	ug/L	16		15		6%
Vinyl chloride	6/23/2014	ug/L	17		17		0%
Xylenes, Total	6/23/2014	ug/L	5	U	5	U	0%

Qualifier U - Not Detected

Chemicals of Concern are highlighted in gray.

The blind field duplicate (MW7) was taken at well MW1.

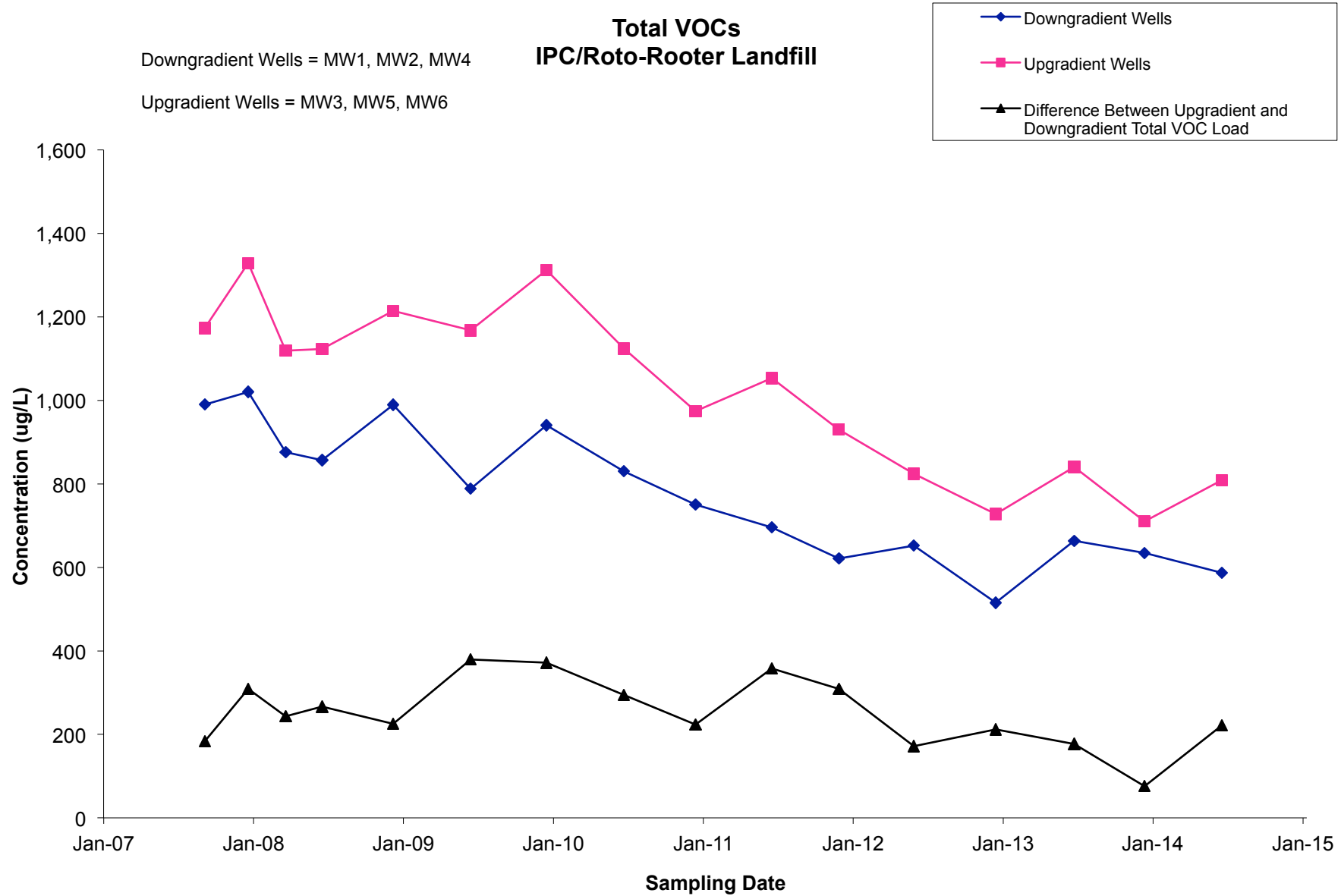
Attachment 7

Total VOC Load Concentration Time Trends

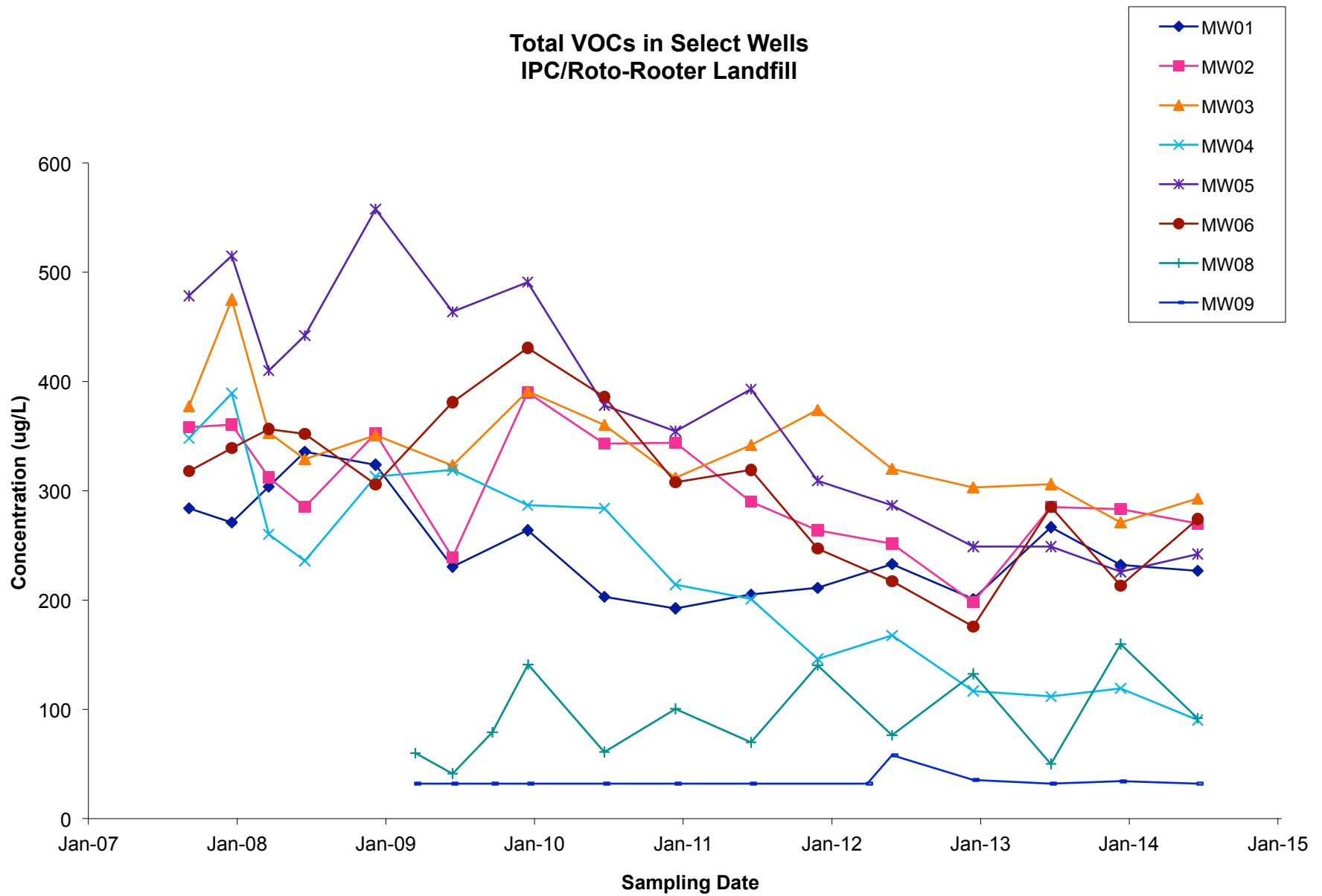
Total VOCs IPC/Roto-Rooter Landfill

Downgradient Wells = MW1, MW2, MW4

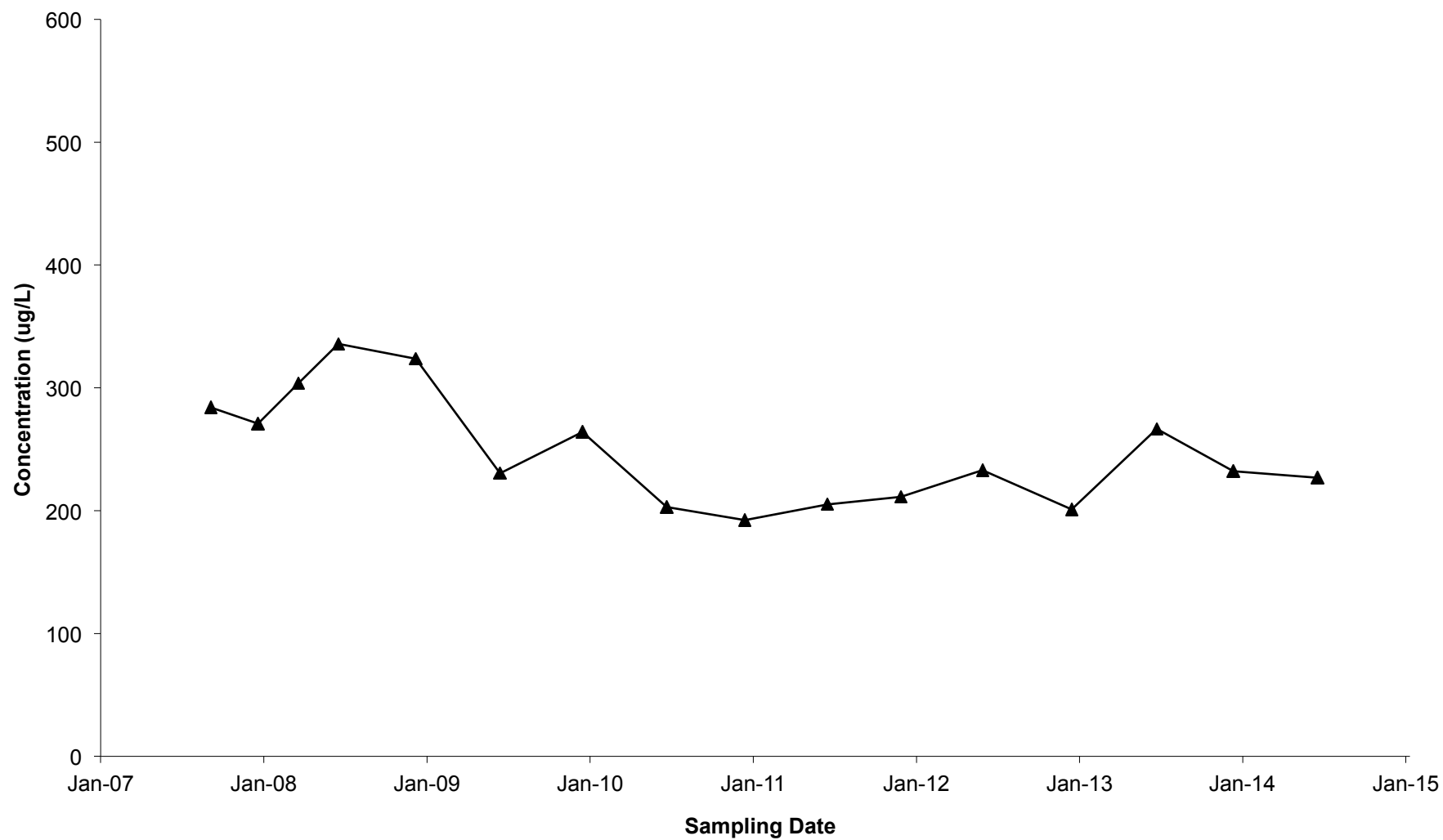
Upgradient Wells = MW3, MW5, MW6



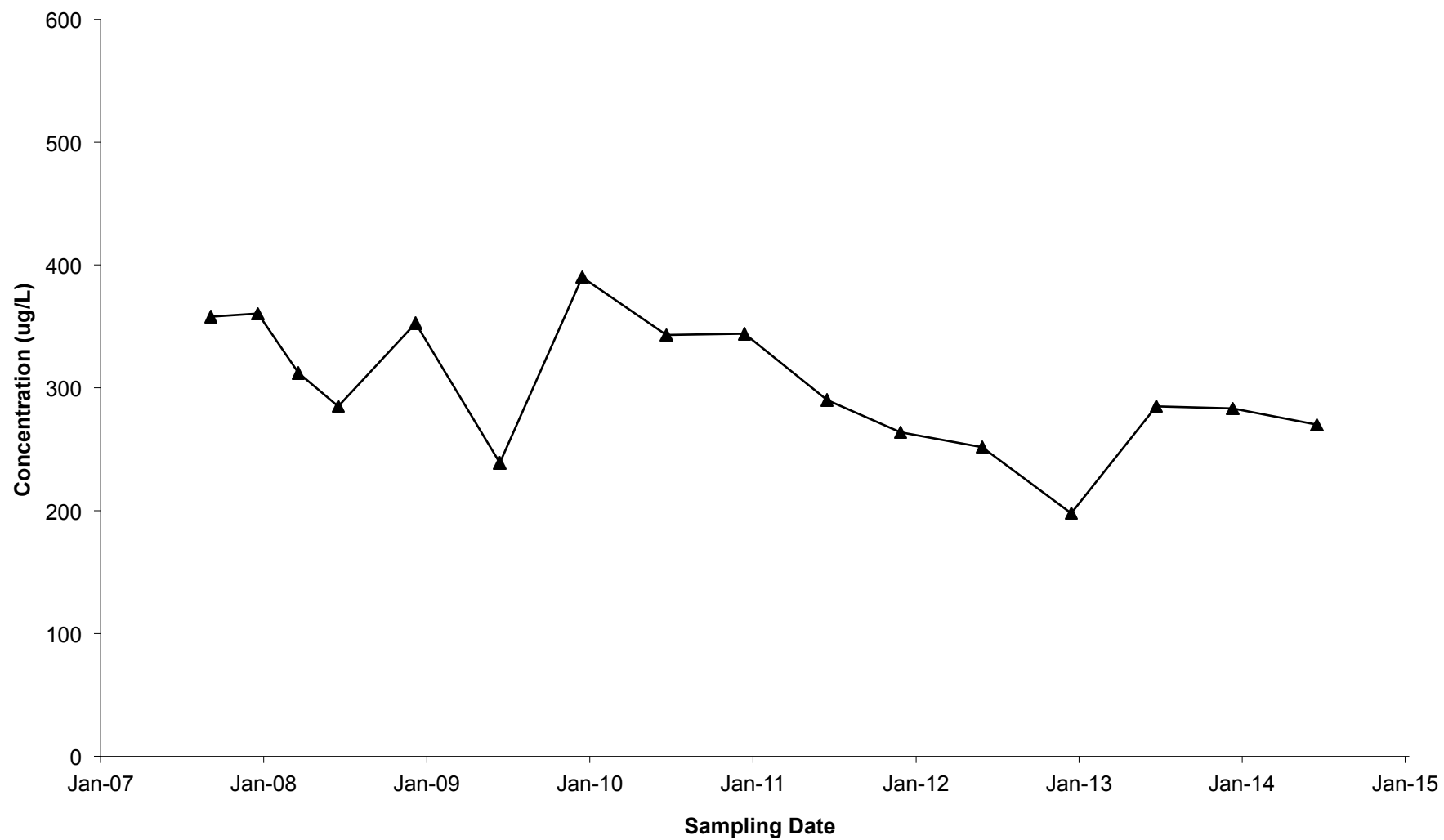
Total VOCs in Select Wells IPC/Roto-Rooter Landfill



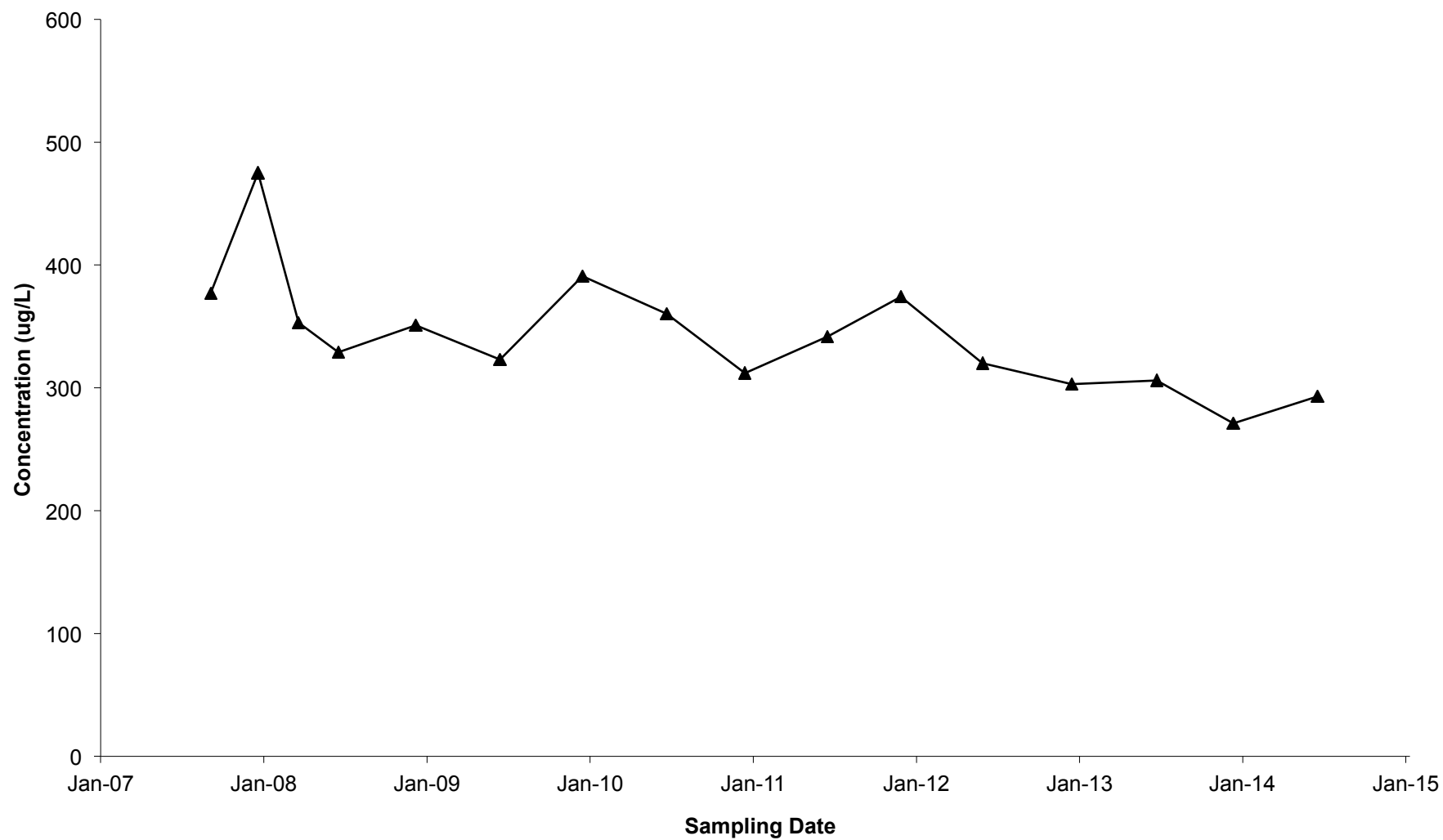
**Total VOCs in Well MW01
IPC/Roto-Rooter Landfill**



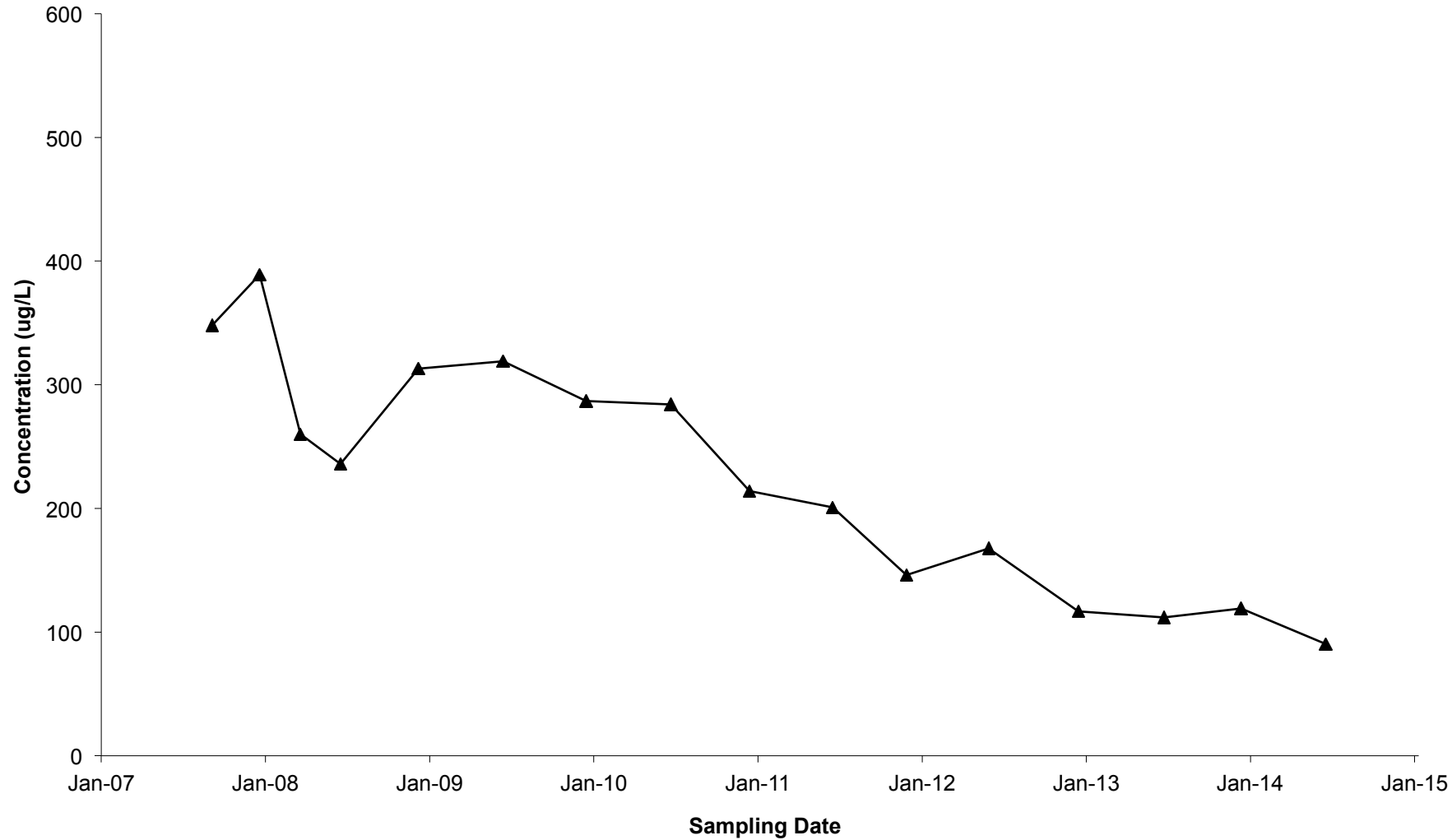
**Total VOCs in Well MW02
IPC/Roto-Rooter Landfill**



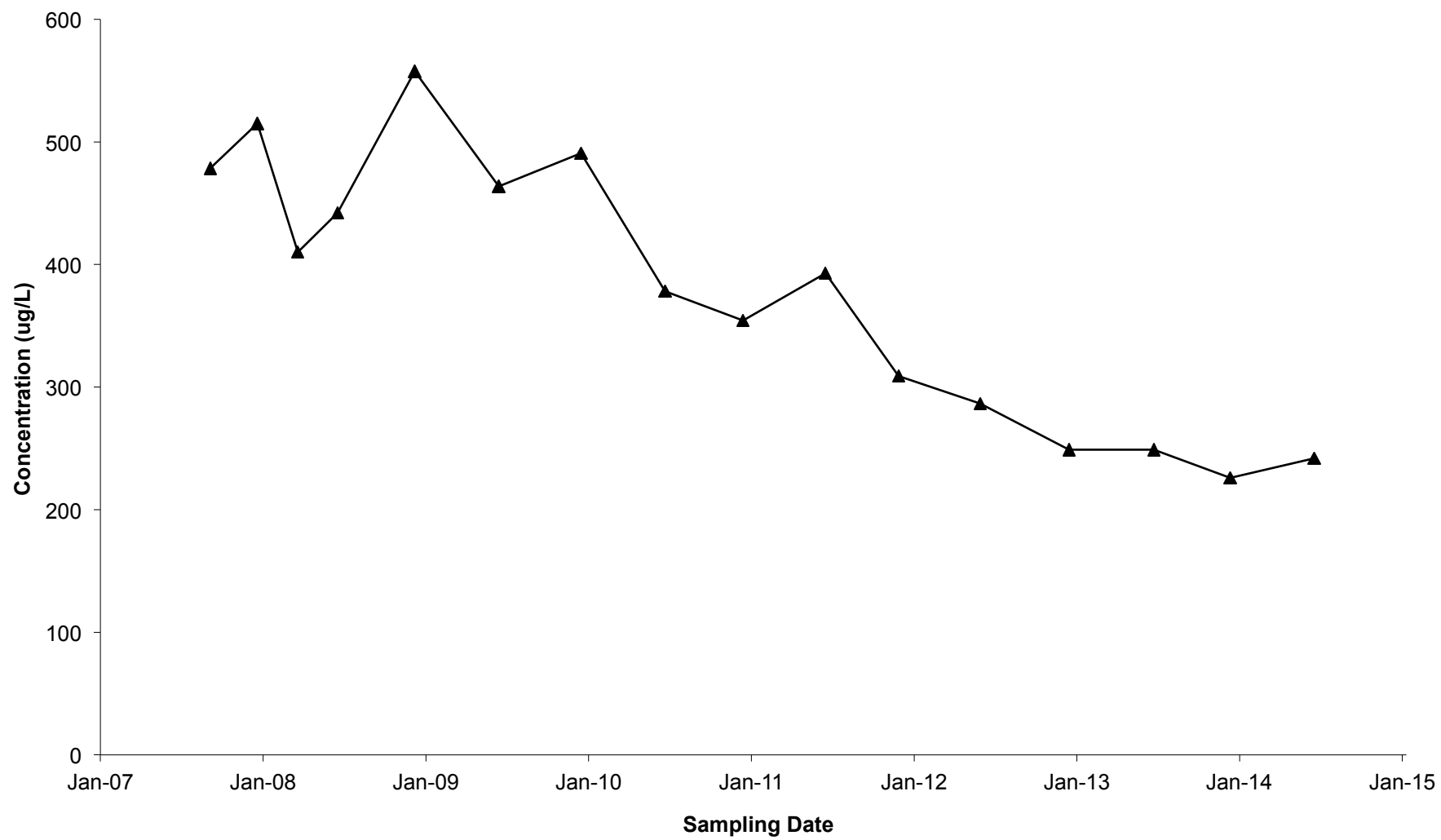
**Total VOCs in Well MW03
IPC/Roto-Rooter Landfill**



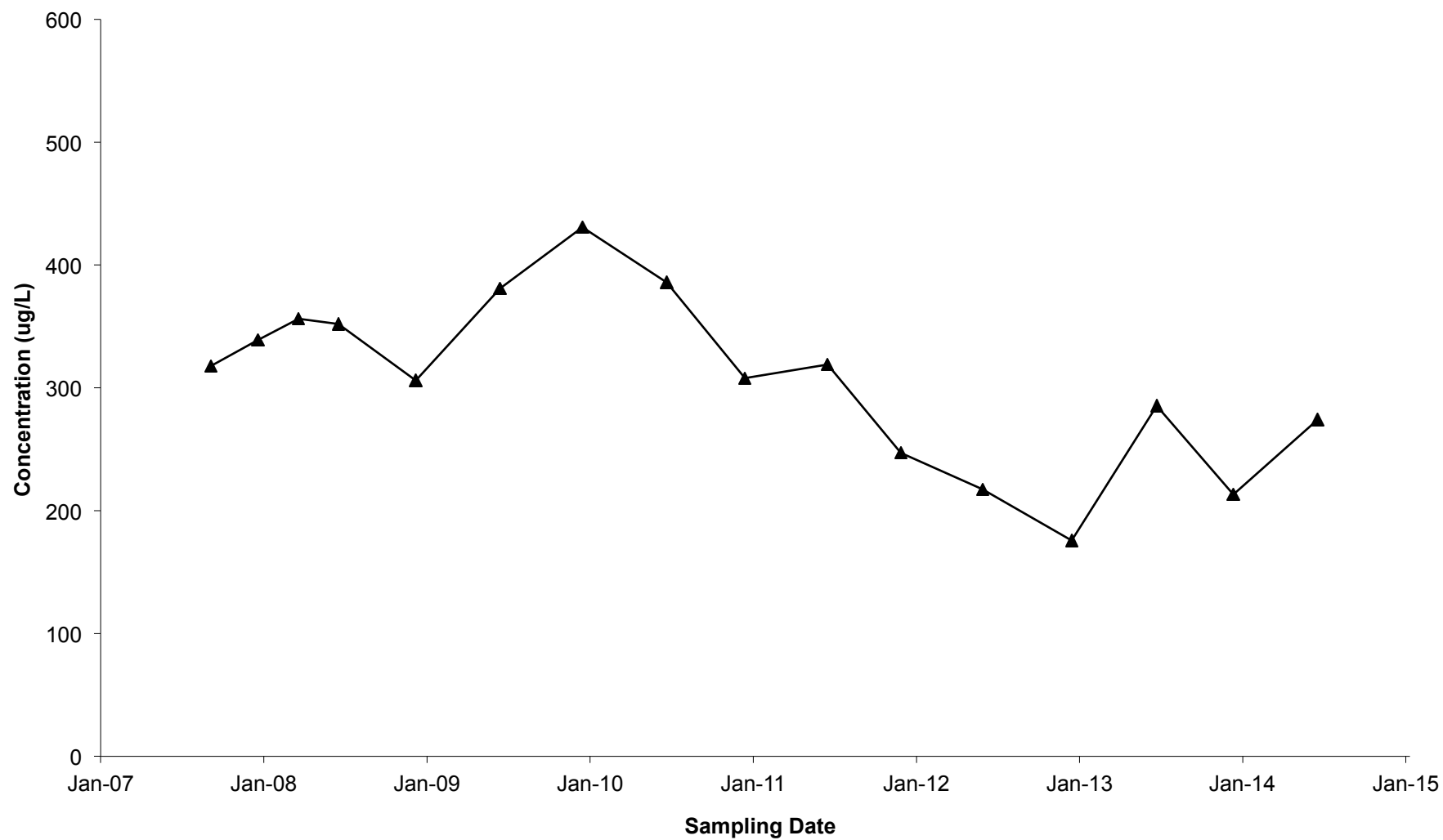
**Total VOCs in Well MW04
IPC/Roto-Rooter Landfill**



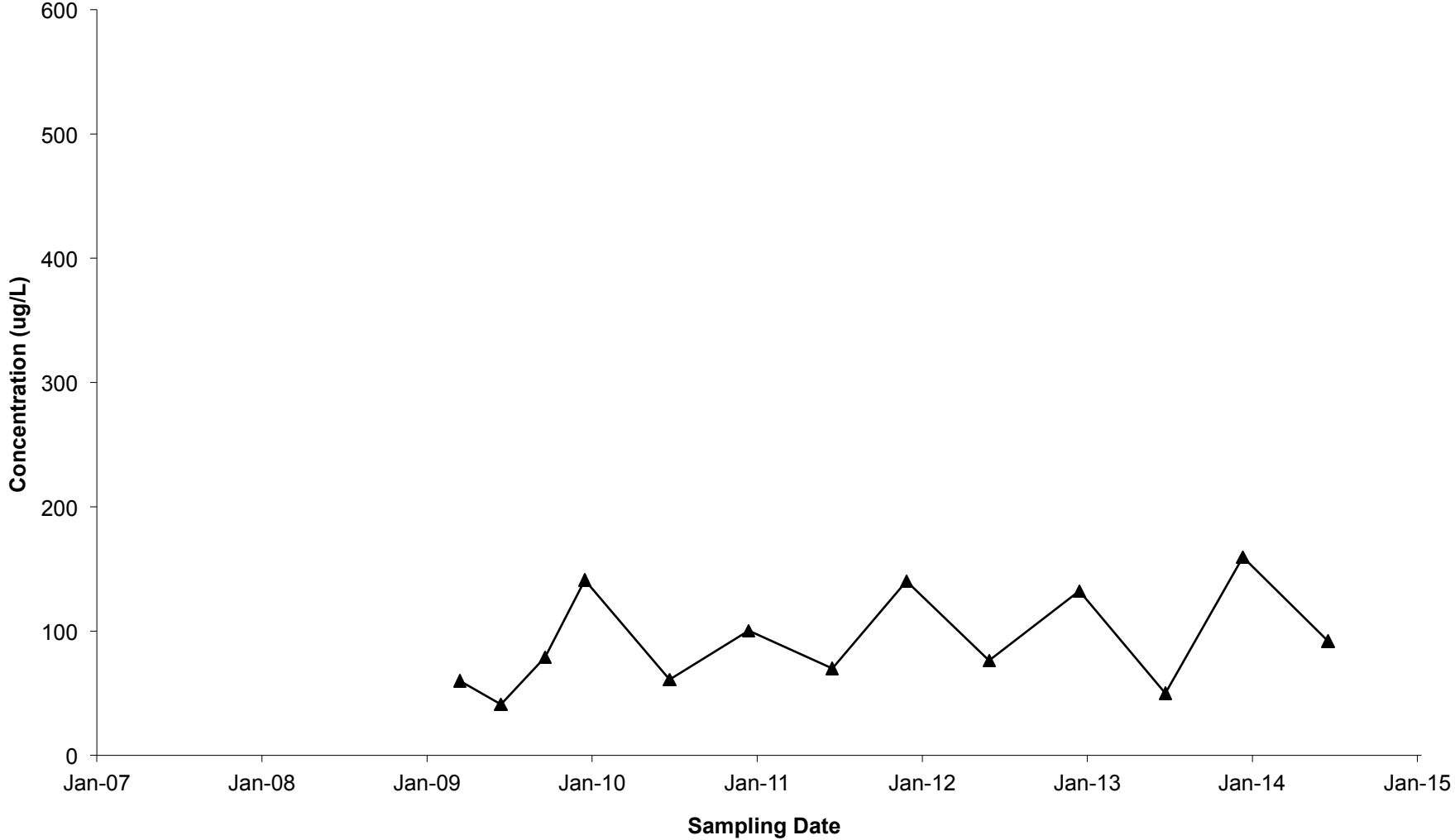
**Total VOCs in Well MW05
IPC/Roto-Rooter Landfill**



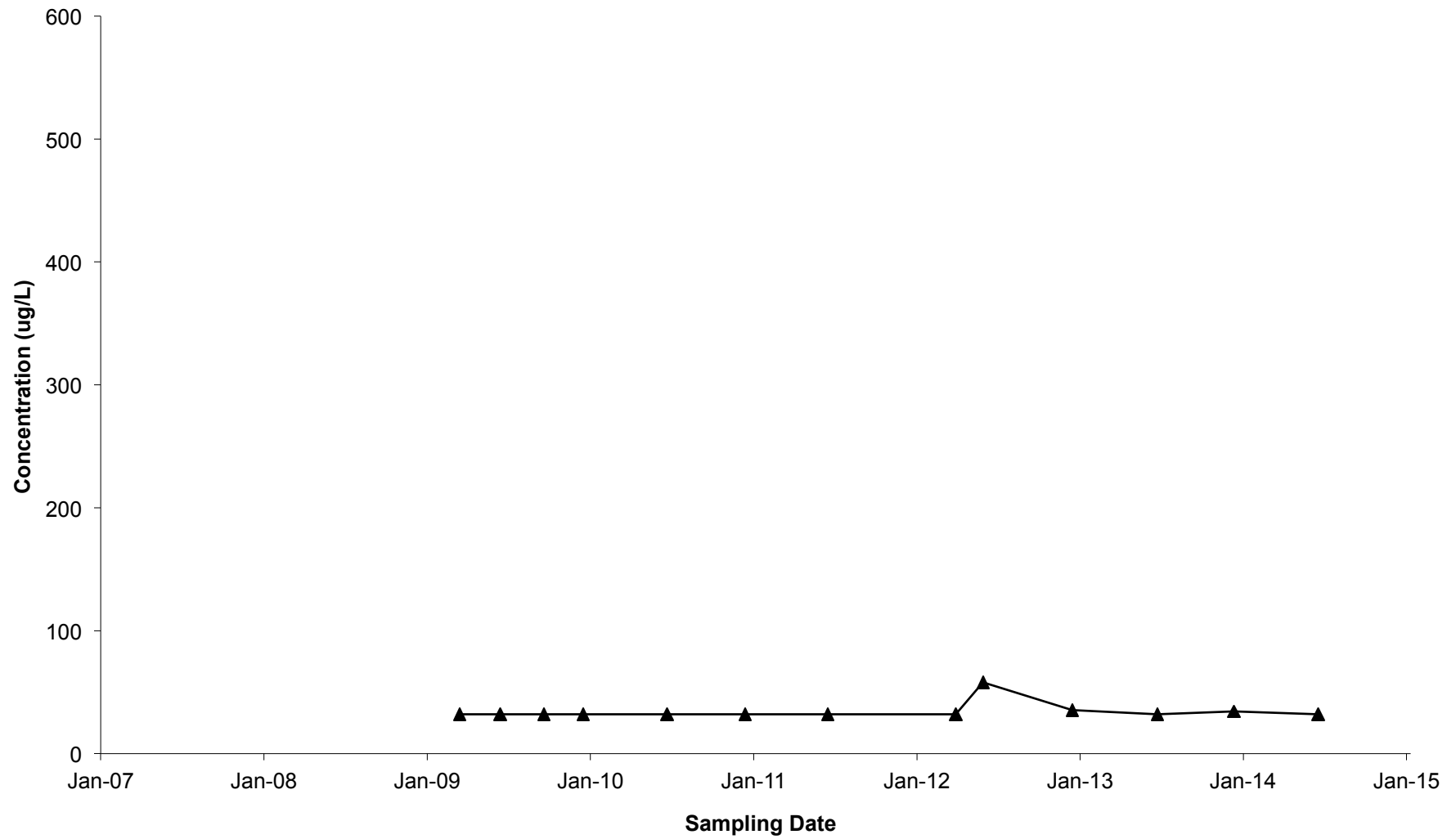
**Total VOCs in Well MW06
IPC/Roto-Rooter Landfill**



**Total VOCs in Well MW08
IPC/Roto-Rooter Landfill**



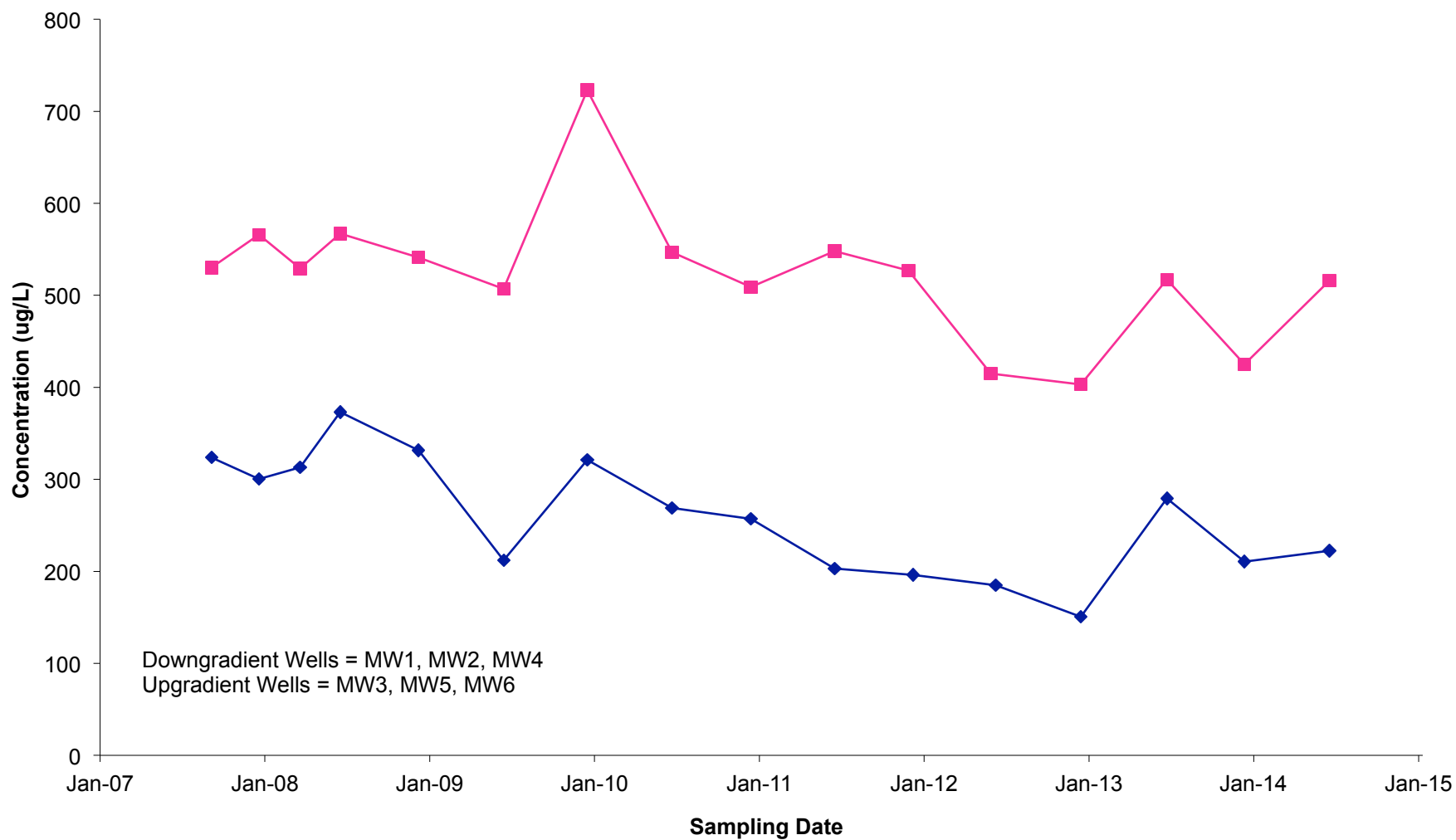
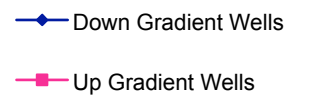
**Total VOCs in Well MW09
IPC/Roto-Rooter Landfill**



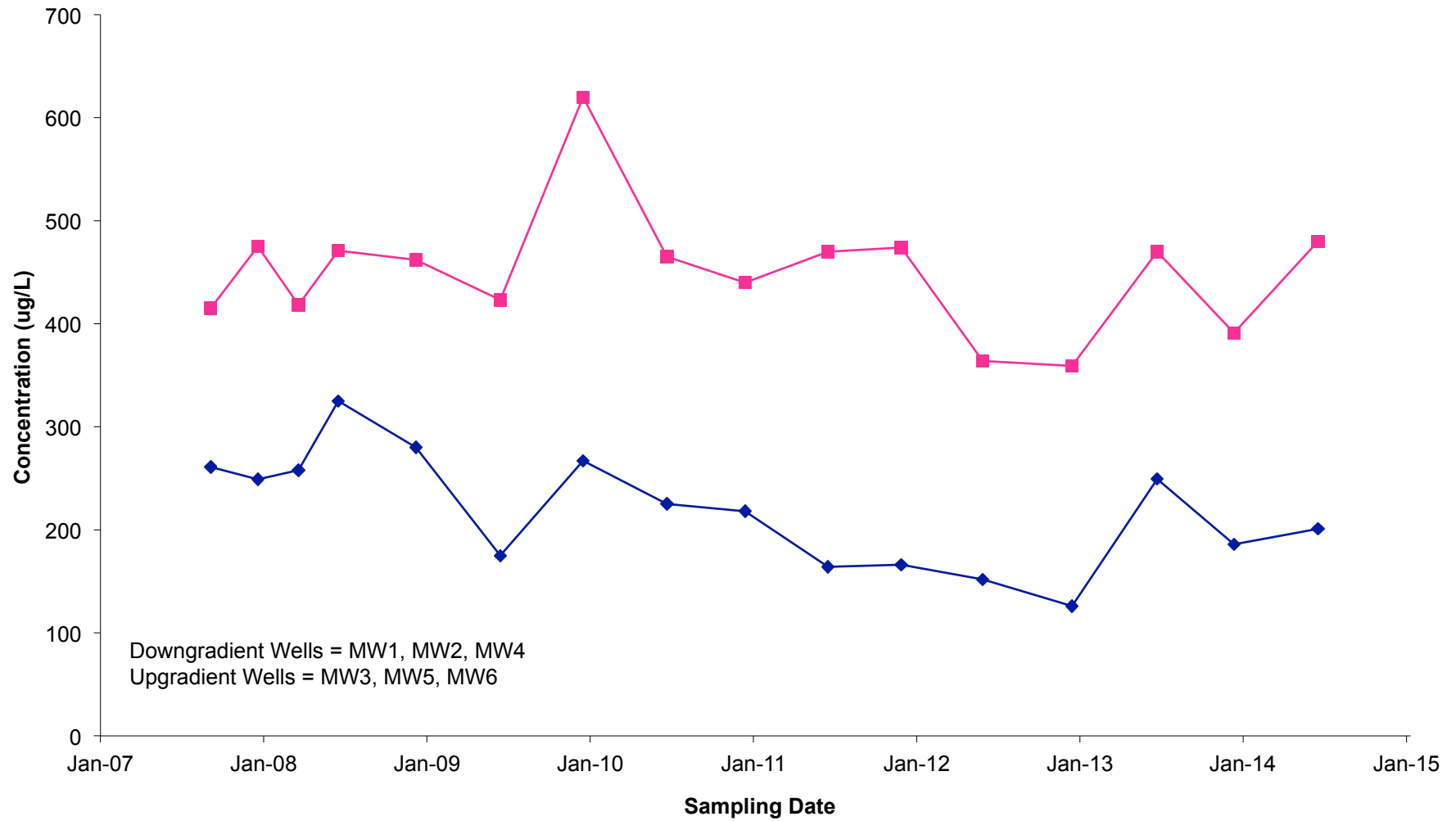
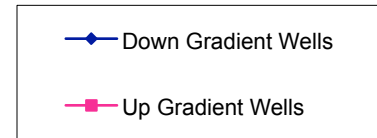
Attachment 8

Total VOC Load Trends (1,1,1-TCA plus TCE only)

Total Trichloroethene + 1,1,1-Trichloroethane IPC/Roto-Rooter Landfill



Total Trichloroethene IPC/Roto-Rooter Landfill



**Total 1,1,1-Trichloroethane
IPC/Roto-Rooter Landfill**

◆ Down Gradient Wells
■ Up Gradient Wells

